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## Final Report Of A Proof-of-concept Demonstration Of The Forms Translator Assistant

Daniel E. Mullally

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INSTITUTE FOR SIMULATION AND TRAINING

Contract Number CS-I-91-32892-2/003  
Department of the Treasury  
U.S. Customs Service

23 April 1992

# Forms Translator Assistant

## Final Report

Institute for Simulation and Training  
12424 Research Parkway, Suite 300  
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University of Central Florida  
Division of Sponsored Research

IST-TR-92-08





**Final Report  
of a  
Proof-of-Concept Demonstration  
of the  
Forms Translator Assistant**

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## **ABSTRACT**

This Report is a summary of work conducted in 1990 and 1991 by researchers at the University of Central Florida, Institute for Simulation and Training on the development of a computer-based Forms Translator Assistant (FTA). Using the FTA, non-English speaking travelers could receive speech and text instructions to assist them in filling out the U.S. Customs Declaration form CF6059B.

Spanish was the language chosen for the initial project, which covered the analysis, design, development and evaluation of the FTA. This project examined the potential advantages of using a combination of animation, recorded speech files delivered via a telephone handset, and text instructions presented on a computer screen.

This research into the use of a computer to successfully deliver self-paced, interactive instructions in a selected foreign language was considered a critical element in the design and development of an automated capability to complete the required Customs and Immigration and Naturalization Service entry forms.

The project evaluated the developed proof-of-concept system and determined the design to be easily used and appreciated by those seeking accurate instructions delivered in their own language. Recommendations were made to continue research and development, which would add additional languages and provide the ability to accept handwritten input.



# FORMS TRANSLATOR ASSISTANT

## Final Report

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**FINAL REPORT**  
**U. S. CUSTOMS**  
**FORMS TRANSLATOR ASSISTANT**

**Proof-of-Concept Demonstration**

**1. INTRODUCTION**

**1.1 PURPOSE**

This technical report is submitted as the final report of U. S. Customs Service Contract CS-1-91-32892-2/003. It discusses the analysis, design, development, and evaluation of a Proof-of-Concept demonstration for a Forms Translator Assistant (FTA) in Spanish.

**1.2 BACKGROUND**

The FTA was conceived and developed as an application of computer technology under research at the University of Central Florida (UCF), Institute for Simulation and Training (IST). The technology under examination in the Computer Assisted Language Laboratory (CALL), was focused on a newly emerging capability to voice record to and reproduce speech from personal computers. The emphasis of this research was to use low-cost, commercially available, hardware and software to deliver language instruction. The FTA was developed to provide both native speech and text to a user seeking instructions in how to complete a required form in English.

The research issues facing the successful development of the FTA were many and varied. To provide simple and intuitive instructions, using the full capabilities of a computer to reach the widest possible user population became the initial design goal of an IST in-house developed demonstration program (Calderon, et al ,1990). The U. S. Customs Declaration Form, Customs Service form 6059B (Spanish) 1984, was selected as the basis for the prototype demo development. This form was selected after consulting with two local (Orlando) U. S. Customs Agents. (See Appendix A).

The resulting demonstration software of the FTA was copyrighted on 17 January 1991 under U. S. Copyright TXU 453746. The copyright is held by Dan Mullally, German Calderon, Xavier Calderon and the University of Central Florida. This FTA demo program was demonstrated widely throughout 1991 to U. S. Customs and Immigration Services personnel as well as the general public. A demonstration of this FTA was presented to U. S. Customs, R&D Division in Washington, DC in June 1990.

The participation of the U. S. Customs Service was sought and gained to participate in the full development of a FTA under the Florida High Technology and Industry Council (FHTIC) Applied Research Grant Program in October of 1990. The FTA project was not selected in the competitive evaluation held by the FHTIC.



Failing to gain FHTIC support, on 27 March 1991 the FTA project was proposed to the U. S. Customs Service, Research and Development Division as an unsolicited proposal. To speed development, the FTA development project was tailored to the constraints of a small purchase so as to not exceed the \$25,000.00 limitation of a purchase order. The Purchase Order was signed by the U. S. Customs, National Finance Center on 22 July 1991. The PO was modified twice on 31 July 1991, to correct discrepancies in wording. The period of performance of six months was established from the date of signing, 7/22/91, until 1/31/92.

On 29 December 1991 a No-Cost Extension was requested by the IST Principal Investigator due to the delays experienced in developing an appropriate 6059B Form. The No-Cost Extension was received from the U. S. Customs, National Finance Center on 16 January 1991. This extension was required to provide time to complete the FTA project which was delayed by the development of a U. S. Customs Declaration Form 6059B (CF6059B) Prototype in English by IST. A Spanish translation of the Prototype CF6059B was then prepared. English and Spanish instructions on how to complete the new Prototype CF6059B questions were written, recorded on audio tape and then recorded to the FTA computer hard drive. The development of the 6059B was an unanticipated hindrance to the timely completion of the FTA contract.

### **1.3 RESEARCH OBJECTIVES OF THE PROJECT**

The stated research objectives of the FTA project were to:

- Take advantage of recent advances in computer technology which support computer delivered speech and text;
- Design a functional Forms Translator Assistant in as short a time as possible; and,
- Produce and test this Forms Translator Assistant for proof-of-concept within six months (or sooner) after program start.

## **2. STATEMENT OF WORK**

### **2.1 TASKS REQUIRED BY THE STATEMENT OF WORK**

The Statement of Work, in the original IST FTA proposal, listed four separate tasks. These tasks were designed to develop and evaluate an FTA demonstration program and develop specification for a full scale development in additional languages. The proof-of-concept demonstration of the FTA was to be completed within a 6 month period.. The project tasks are listed below:

- (1) Develop a demonstration program of the FTA in Spanish,
- (2) Demonstrate and evaluate the proof-of-concept program,
- (3) Give demonstration and briefings to sponsor,
- (4) Develop specifications for full scale development in additional languages.

The scope of the proof-of-concept demonstration of the FTA was defined by the selection of the form (CF6059B), the equipment suite (IBM™ compatible PC with Covox Speech Thing™ ) and the Spanish language selected.



### **3. ANALYSIS**

#### **3.1 TASK ANALYSIS**

The task analysis for the initial design of the FTA sought to identify and develop:

- (1) the appropriate presentation format for the CF6059B in both English and Spanish,
- (2) the instructions needed to complete the CF6059B in both English and Spanish,
- (3) the elements of information necessary for the user to interact with the computer to seek and receive instructions.

##### **3.1.1 CF6059B Design and Content Analysis**

An analysis of the appropriate presentation format for the CF6059B was conducted. The initial step in this analysis was to determine the format for the computer graphic presentation of the CF6059B required in the FTA presentation. The U. S. Customs Declaration Form CF6059B (102584) (Spanish) was originally proposed by IST for this proof-of-concept application of the FTA. (See Appendix A).

Liaison was made with U.S. Customs Service-Headquarters, Office of Passenger Enforcement and Facilitation, Inspection and Control Division. It was determined that Customs Declaration Form 6059B (102584) had been modified in 1988 (042988) and again in 1989 (092089) and was due for a further revision in 1992. (See Appendices B, and C). All versions of the CF6059B (1984,88,89) asked as question number 1: "Name" in the format: Last, First, Middle. Only the 1984 version of the CF6059B asked, as question number 2, the "Number of family members traveling with you?" The 1988 and 1989 versions of the CF6059B asked for the "Date of Birth (DOB)" as the second question to accommodate the provisions of the Advanced Passenger Information System (APIS).

The planned 1992 revision was required to expand the information content of the questions contained in the declaration form. Questions on country of residency and the last countries visited were to be added to the redesigned CF6059B. The 11 question 6059B form was to be expanded to include 12 questions, some such as: name, citizenship/residency, and countries visited, having multiple parts.

The design and content analysis of the CF6059B had to consider the requirements of the Advanced Passenger Information System (APIS). The APIS system was designed to interface with the Interagency Border Inspection System (IBIS). IBIS was created as a result of a study by the Office of Management and Budget (OMB) to acquire "lookout" information. This name and DOB format (coupled with the passenger's document numbers, if available) was a key element in the design of the APIS. The APIS provides the IBIS the pre-arrival passenger information to the Customs Service Data Center. The APIS information is then made available to the IBIS equipped airports via the Treasury Enforcement Communications System II (TECS II).

Several issues were raised during the design and content analysis of the CF6059B. The first design issue revolved around the placement of the signature block on the form. The form design was examined from the perspective of the user versus the inspecting officer. It was noted, during the initial task analysis, that the Customs Inspector receiving the CF6059B from the traveller had to scan the front and back of the form for completeness. He had to check the blocks on the front to see if any were marked Yes, which



would require further action on his part. Additionally, he had to turn the card over to see if the signature block was completed with signature and date.

Another design issue centered on the format of the Date of Birth (DOB) and the Date of Signature (DOS). In the analysis of the various CF6059Bs it was noted that the format for requesting dates varied from form to form. In 1984 for DOB the Month/Day/Year format was used, for DOS the Month/Day/Year format was used. In 1988 and 1989 the format was Day/Month/Year. The INS forms I-94 and I-94W used the Day/Month/Year format. An informal survey among the Spanish speaking students attending the University of Central Florida determined that a standard protocol of Day/Month/Year is an accepted standard, the rule followed is simple... "enter from the smallest to largest value."

The issue of the size or dimensions of the CF6059B form was analyzed. A suggestion to make the card the size to "fit the shirt pocket" was examined and discarded as ambiguous from the perspective of the male/female clothing standard that requirement suggested. Observations of travelers moving through the "Airport of the 1990's" demonstrated that the larger the card the greater the probability that the traveler would not put the card away in an inner pocket or in a purse or bag after clearing INS primary inspection, picking up their luggage and proceeding to Customs/Agriculture secondary inspection. User comments on the size of the CF6059B lead to a determination that the 4 1/4" x 8 1/2" format (Half Page) was a useful size for carrying, storing and filing. The volume of detailed instructions, required to explain the declaration requirements, provide the required warnings and have space for the various "Paperwork Reduction" and "Burden" statements, easily justifies the increased CF6059B form size.

### **3.1.2 Instructions for Completing the CF6059B Analysis**

A survey of the U.S. Customs Service-Headquarters, Office of Passenger Enforcement and Facilitation, Inspection and Control Division and the U. S. Customs Service Academy, Inspection and Control Training Division (FLETC, Glynnco, GA) indicated that no formal written instructions on how to complete the CF6059B had ever been developed by the U. S. Customs Service. Major airlines, for example, were questioned on the procedures and instructions they used to assist foreign national passengers in completing the CF6059B and I-94/94W.

It was determined that if any instructions had been developed they had been the work of airlines attempting to develop aids to assist foreign nationals travelling on their airline. The rules for filling out the "Baggage Declaration" or "Bag Dec" appear to have been a outgrowth of the original oral declaration made by travelers to the Customs Officer at the port of entry. The "Bag Dec" is used for all international airline passengers, sea travelers on Passenger and Cruise Ships and some selected land travelers.

### **3.1.3 FTA Human Computer Interface Analysis**

The initial task analysis for the FTA identified a human computer interface (HCI) design requirement that would allow for the delivery of spoken, written, and non-verbal instructions to the largest possible user population. The purpose of the FTA was to replace the human in the presentation of instructions in how to fill out the selected form, the 6059B. That inferred the broadest HCI design parameters, capable of reaching the widest possible presentation potential, encompassing the most literate to the least literate non-English speaker.



The HCI design issues were critical to the success of the FTA. The FTA design had to encompass the delivery of text, speech, and animated (non-verbal) instructions to reach the widest possible audience of users (Calderon, et al, 1990). The HCI analysis design issues focused on:

- Visual presentation (Computer Screen)
- Speech presentation (Telephone Handset)
- Control interface (Keypad)

**The Visual Presentation:** A computer screen had to be designed to accommodate the presentation of the initial interface instructions in multiple languages. The screen had to provide unambiguous and intuitive visual instructions to the first time computer user. The screen had to be designed to accommodate the widest possible literacy. The screen had to be able to survive rough use in a public environment. (Galitz, 1985) (Gilmore, 1989).

**The Speech Presentation:** The speech presentation of the FTA instructions had to be accessible to the widest range of user hearing capability. The FTA had to provide recognizable speech instructions in a public environment without adding to the noise pollution of, for example, an international airport arrivals area. It had to provide user selectable speech amplification levels to accommodate the provisions of the Americans with Disabilities Act without adding to the ambient noise level. It had to deliver oral instructions to users whose hands might be occupied with other tasks such as writing, or operating the user control interface.

**The Control Interface:** An analysis of the requirements for the user to interface with the computer presented instructions of the FTA indicated that a simple intuitive control would be required. The control interface had to be rugged to withstand continued use in a public access environment. It had to provide positive tactile feedback to the user to indicate interaction and acceptance of the desired input. The device had to provide a widely accepted and easily understood format for recognition.

### 3.2 HARDWARE ANALYSIS

Previous research and development experience with the design of low-cost, computer-based speech presentation at IST had established a requirement to provide an IBM™ compatible PC with Covox Speech Thing™ in the development of the FTA proof-of-concept demonstration. A telephone type keypad was determined to best suit the need for a user control interface.

### 3.3 SOFTWARE ANALYSIS

The previous IST research and development experience with the initial FTA demonstration program was used as a departure point for the software analysis in the development of the FTA proof-of-concept project. Commercially available software (IBM LinkWay™) was analyzed, tested and used when available and suitable in the development of the FTA. Additional unique software was written in Turbo C++™ to provide screen time out control protocols and keypad interface routines.

### 3.4 SUMMARY OF ANALYSIS

Analysis of the FTA design requirements were positive and indicated a low-risk approach using the previously developed FTA demonstration as a departure point with respect to hardware, software and



design approach. A decision to procure and use Linkway™ as the development software shell was made after a survey of commercially available software determined it to be the best available product.

The initial task analysis for the FTA identified a design requirement to allow the delivery of oral and written instructions to the largest possible user population. That requirement inferred the broadest design parameters to ensure the widest presentation capability, from the most literate to the least literate user. Oral and written text instructions that would meet the lowest literacy level were required. Spanish was selected as the target language for the Proof-of-Concept development phase of the FTA in the initial proposal. This language was picked due to the availability of both Spanish speaking developers and test subjects at UCF and in central Florida.

While searching for the optimally simplistic interface device for the user to interact with a computer the telephone keypad was examined in detail. The recent increase in telephone voice mail systems has given rise to a variety of systems using the keypad as a user control device. The metaphor of the telephone keypad is international in character. The use of a telephone keypad as an input device can bridge the international language barrier by using the familiar arabic numbers (1-9 plus the 0) and the recognizable images of the # (pound) and the \* (star).

A analysis of the state-of-the-art in telephone keypad interface designs available ruled out the use of the familiar Dual Tone Multiple Frequency (DTMF) system. The reason for this decision is that an interface card similar to a telephone modem must be installed in a computer in order for it to interface with commercial telephone lines. Power for this system is provided by the telephone, not by the computer. The design of the FTA did not require this degree of complexity nor additional cost.

Analysis of the format of the CF6059B to be used in the FTA design required a choice be made between the three different forms currently in circulation; or the design of a new form created with a view of computer presentation. In light of the obsolescence of all the available CF6059B forms, it was determined that none of the available CF6059B forms were appropriate for use as the basis for the FTA proof-of-concept demonstration. The decision was made to design a new 14 question form in English and Spanish based on the INS I-94/94W format. (See Appendices F and G).

### **3.5 DESIGN APPROACH SELECTED**

The user was presented an animated choice of languages on a computer with intuitive graphic instructions on how to interact with the computer using a telephone style keypad. Once a language is selected screen text and telephone handset delivered oral instructions will be provided to the user. The user can select a numbered question shown on the screen, which corresponds to the question numbers of the printed CF6059B Spanish Prototype. The user will receive detailed instructions, in text on screen, and recorded native speech via the telephone handset.

The ability of the Customs inspector to assist or to answer disputed questions is facilitated by providing a printed English text presentation of the translation. With continued use, some level of language familiarity should be developed by the Customs inspector. Appendix J contains a translation of the Spanish instructions.



## **4. DESIGN**

### **4.1 CUSTOMS DECLARATION FORM 6059B DESIGN**

After consultation with the Contracting Officers Technical Representative (COTR) of the FTA project, the design of the FTA CF6059B was changed. A decision was made to use the 1992 prototype revision developed by IST for the FTA proof-of-concept demonstration.

Major changes were made to the size, question formatting and sequence, date of birth and signature format, declaration signature placement, and the incorporation of printing guides on the prototype 6059B. These design changes provided for an easier scanning treatment by the inspecting Customs Officer by aligning the yes/no blocks and forcing the BLOCK PRINT IN ALL CAPITALS format by providing vertical printing guide tick marks. Additionally these design changes brought the CF6059B more in line with the INS I-94 and I-94W forms (See Appendix E) offering a future automated date entry capability and providing a question format standardization and common presentation methodology.

Based on the analysis a 14 question CF6059B was created in draft form in English by IST and provided to the Inspection and Control Division (Appendix D) for approval. A critical design decision was made to move the signature block to the front of the 6059B. This reduced the computer graphic display requirement of the FTA while greatly improving the ability to review the 6059B for accuracy and completeness by the inspecting officer. This form was subsequently modified (Appendix F) and approved. A Spanish prototype (Appendix G) was produced from the approved English prototype form and was used in the design and development of the FTA. The prototype English CF6059B form produced by IST in conjunction with this FTA project is currently undergoing review for adoption by the U.S. Customs Service.

### **4.2 HARDWARE DESIGN**

Previous research and development experience with the design of low-cost, computer-based speech presentation at IST had established a requirement to provide an IBM™ compatible PC with Covox Speech Thing™ in the development of the FTA proof-of-concept demonstration.

It was recognized early in the design phase that provisions to shield the FTA computer, keypad and speech generation equipment from vandalism or theft had to be provided, if the FTA were to be put in a position to service the public. This requirement led to the development of a moveable box-like container offering protection to the FTA equipment suite. This container was labeled the "kiosk".

The kiosk was constructed for the FTA by the principal investigator from scrap components. The two foot square frame was constructed from one inch square hollow steel tubing. The steel tubing provided a rigid and lightweight frame to support the lower shelf housing the computer, the power strip and, the Covox Speech Thing™. The top shelf held the 14" VGA screen. The back and sides were enclosed for security by 1/4" white hard coated fiber board. The top of the kiosk was enclosed with a 3/8" sheet of black painted plywood. Four, 4" diameter wire mesh covered vent holes were cut into the top panel. The top panel was also fitted with an electric exhaust fan to allow additional cooling of the enclosed computer space. A push on-off switch for the electric fan was extended through the top panel.



The back of the enclosed kiosk compartment was hinged on the left side with a 1/4" piano hinge which allowed access to service the computer equipment. The right, unhinged side, of the door was fitted with an inset lock to improve security.

The bottom of the computer compartment was enclosed with a 1/2" sheet of black painted plywood drilled to allow the cord attached to the power strip to extend below the kiosk.

Four one inch square hollow steel tubing legs were attached to a solid 3/8" composite board base by corner brackets. The base was fitted with casters attached to the underside of the base to allow the FTA to be moved easily, once assembled. The base and legs were designed to be removed to allow for increased portability and pack-up of the kiosk.

Immediately below the computer screen a shelf, slanted at 45°, was attached. This shelf, which extended out six inches from the frame, provided a mounting surface for the telephone style keypad which was centered for left or right hand access immediately below the computer screen.

The rigid frame allowed a slanted writing surface to be attached to the front of the kiosk, usable by either right or left handed users. This angled writing surface extended out from the frame 13 1/4" to provide a firm writing surface on which to place the form being filled out with the help of the FTA. The forward edge of the writing surface was designed to be 36" above the floor to provide accessibility to the 90th percentile of international users. (MIL-STD-1472C, 1984) (Note: This writing surface was constructed to house a pen-based digitizing pad if future development of the FTA proceeds to research and development of a handwriting recognition input system to automate the completion of Customs forms suggested in the Enhanced FTA (EFTA) project. See Attachment 4).

The telephone handset cradle hook and switch, the telephone handset armored tether and power cable, and the speech amplifier switch were all mounted, to the left hand side of a 1/8" thick mild steel plate. This front steel plate was attached to the tube frame and provided additional rigidity to the kiosk. The amplifier circuitry housed in a plastic experimenters box attached to the back of the front plate with a right angle bracket. A hole, shaped to conform to the dimensions of the computer screen, was cut in the front steel plate to the right of the centerline of the kiosk. The telephone handset and amplifier switch were mounted to the left of the computer screen.

#### **4.3 SOFTWARE DESIGN**

The previous IST research and development experience with the initial FTA demonstration program was used as a departure point for the software design in the development of the FTA proof-of-concept project.

IBM LinkWay™ protocols were examined in the design phase of the FTA for adequacy. The requirements to produce sound, animation, and screen test files required additional software specifically designed to control the input device (Keypad) and the screen presentation and animated graphics timing protocols. Available software code from previous FTA demonstration programs were modified as required. Additional unique software was designed to be written in Turbo C and compiled in Borland Turbo C++™ to provide control of the FTA interface routines. The availability of previous Covox™



software developed speech files for the FTA initial Demo offered a starting point for the development of this FTA proof-of-concept demonstration. Previous speech files, however, had been limited in size and the upper limit of Covox™ speech files had not been demonstrated with IBM LinkWay™. This issue posed one of the potential design pitfalls with the software combination selected for development.

#### **4.4 SUMMARY OF DESIGN**

The choice of language, the Customs Form, the computer and the speech storage and delivery method were all proposed in the initial IST FTA proposal.

All of the elements of the FTA were reviewed for design adequacy during the analysis and design phases of development process cycle. The telephone keypad proved to be an intuitive and easily understood metaphor for a user input and control device.

The selection of an obsolete Customs form undergoing replacement required the analysis, design, and development of a prototype form suitable for use in this FTA proof-of-concept demonstration program. This created unforeseen delays until the CF6059B prototype form was designed, reviewed, redesigned, and finally approved.

#### **4.5 DEVELOPMENT APPROACH SELECTED**

The development approach for the FTA was a straightforward process involving progressive steps of prototyping: prototype design, build, test, redesign, retest. All of the elements of the FTA were modified after critical review, initially by the development team, secondly by foreign students attending the University of Central Florida, and finally by Spanish speaking passengers arriving at the Orlando International Airport, international arrivals terminal.

Several alternate speech recording and presentation methods were attempted but were discarded during the development phase in favor of the low-cost and robust combination of Covox™ and the telephone handset.

During the development phase the FTA software was constantly being reviewed and tested for adequacy. Design flaws in timing, screen presentation and linkage were detected, corrected and tested and adopted after retesting by external review. The location of the Computer Assisted Language Lab at IST was such that the development of the FTA was under constant public attention. A high volume of visitors provided a constant stream of reviewers while the FTA was under development.

The FTA was demonstrated to a variety of Customs and Immigration and Naturalization Service officials at the Orlando International Airport. The Commissioner of Customs, Mrs. Carol B. Hallett, attended a demonstration of the FTA during a visit to Orlando on 20 December 1991. She used the FTA with the prototype English 6059B, as the Spanish version was still in development. During February of 1992 several Deputy Commissioners from the INS observed a demonstration and their comments and critical review were of great value in the design of the FTA.



## **5. DEVELOPMENT**

### **5.1 CUSTOMS DECLARATION FORM 6059B DEVELOPMENT**

An analytical survey was conducted of several forms used by U.S. Customs and the Immigration and Naturalization Services. The CF6059B was then modified at IST based on these surveys. The CF6059B was modified using the Immigration and Naturalization Service form I-94 and I-94W as a model. The question format of the I-94/94W was retained, where possible, to avoid the confusion to foreign travellers when asked the same question on two forms using different formats. The I-94/94W was also used as a format model in the design of the Prototype CF6059B by providing guides for typing or printing the required information in English in ALL CAPITAL LETTERS. (See Appendices E, F, and G))

Instructions in English and in Spanish were created to provide a basis for the speech and text instructions required in the FTA. Instructions for the completion of the CF6059B were designed to be as comprehensive as possible. Instructions were written in English and tested for content and appropriateness. The instructions were then translated into Spanish and tested for cultural suitability, modified and retested and finally adopted. Changes discovered in context, and modified for the Spanish translation, were feedback to the modify the English instructions if required.

Appendix H contains the text of the final English instructions tested and modified for use in the FTA. Appendix I contains the text of the final Spanish instructions translated from the English instructions. The resultant final product was accepted after several tests of their adequacy were made in tests conducted at the University of Central Florida (UCF) and at the Orlando International Airport (OIA).

### **5.2 HARDWARE DEVELOPMENT**

An IBM PC clone utilizing a 386SX CPU operating at 16 MHz was procured as the FTA development vehicle. A 14" Super VGA 1024 x 768 color monitor and a 106 MB hard drive were specified in the computer procurement to allow additional forms and other languages to be added to the FTA proof-of-concept demonstration. A subtask of Task 1 of the Statement of Work called for a determination of the "appropriate configuration for a low-cost delivery device".

A Covox Speech Thing™ was available from previous language research projects at IST and was utilized during the development of the FTA.

During the analysis and design phase of the FTA development it became apparent that a computer based system such as the FTA would require a hardened protective enclosure to protect the computer from vandalism if placed in a public access area. Liaison was made with the Stromberg-Carlson Co. located in Lake Mary, Florida. Engineering personnel were extremely helpful in providing guidance in the design of telephone-like apparatus intended to be used by the general public. They donated to IST a telephone handset, complete with armored cable and a cradle hook and switch assembly from a public model pay-phone, which they manufacture in their plant in Florida. They also provided information on the human factors design features of public access telephones. They provided several reference catalogues and manufacturers specification sheets for indoor and outdoor public telephone booth equipment.



One of the sources cited by Stromberg-Carlson was the Wintel Corporation, located in Longwood, Florida. Wintel specializes in the manufacture and repair of public telephone equipment. Wintel designed, and donated without cost to IST, a specially manufactured telephone handset. The handset was made without holes drilled in the mouthpiece or a microphone insert. The handset came equipped with a 600 lb. breaking strength steel cable inserted within the external armored cable.

Wintel also donated an in-line speech amplifier which was incorporated into the FTA to provide a three-step speech amplification capability. This model 456VCA-DMA Volume Control Amplifier Unit provides the speech amplification capability required by the Americans with Disabilities Act of 1990. With the cooperation of researchers at IST and Wintel engineers a 9V power source was modified with a locally designed and fabricated power supply. The modified power supply delivered 20 mA, making the telephone amplifier compatible with the the Covox Speech Thing™ equipment used in the FTA. The hearing aid compatible amplifier was integrated into the FTA demonstration kiosk. The three-step-level switch was placed immediately below the telephone cradle hook. Pushing in on the spring-loaded switchplate sequentially steps up the volume of the Covox™ generated speech delivered through the telephone handset earphone speaker. The three-step-level amplifier switch (0 db, 6 db, 12 db) is designed to sequentially cycle from the lowest to the highest level and then return to the lowest level. The technical assistance provided by of Mr. David G. Steinmetz, the President of Wintel, Inc., was of immense value in the design and development of the FTA system. Mr. Gregg Staggs assisted in the design and integration of the Volume Control Amplifier Unit into the FTA system.

A telephone keypad was donated to IST for research and development by Linear & Digital System, Inc. of Centerville, Ohio. This model KBD-112 keypad was recognized by the computer as a standard keyboard after appropriate software program modifications were written, tested and modified prior to acceptance. The use of a telephone keypad as an input device did provide an unambiguous bridge to the international language barrier. Mr. Dale A Beard, the President of Linear & Digital System, Inc., provided technical assistance and guidance in integrating the keypad into the FTA system.

### **5.3 SOFTWARE DEVELOPMENT**

The previous IST research and development experience with the initial FTA demonstration program was used as a departure point for the software design in the development of the FTA proof-of-concept project.

IBM Linkway™ protocols were utilized in the development phase of the FTA. Additional software was specifically developed to control the input device (Keypad) and the screen presentation and animated graphics timing protocols. Available software code from previous FTA demonstration programs were modified and used where possible. Additional unique software was developed and written in Turbo C and compiled in Borland Turbo C++™ to provide control of the FTA interface routines. Previous Covox™ software developed speech files for the FTA initial Demo offered a starting point for the development of this FTA Proof-of-Concept demonstration. Previous speech files, however, had been limited in size and the upper limit of Covox™ speech files had not been demonstrated with IBM Linkway™. This issue was specifically addressed and resolved in this software development phase by using purpose-built memory saving options found in the IBM Linkway™.

IBM Linkway™ provided the framework for the FTA software development. Its easy methods of displaying and swapping high-quality pictures on a VGA screen, changing the screen color palette, and



interfacing with external programs facilitated its use as a primary software development tool. The palette-changing feature was used to implement the instructional animation that opens the FTA program.

Since the IBM Linkway™ displays pictures stored in the PC-PaintBrush™ file format, a standard picture format, a variety of PC based drawing programs could be used to create the pictures used throughout the program. The images of the CF6059B were imported from the Macintosh™ computer where the prototype forms were created using ALDUS Freehand™.

The main control structure of the program is an IBM LinkWay™ automatically-executing ("AutoExec") script, which utilizes several subroutines. All subroutines written in IBM LinkWay™ scripts were consolidated into a single "AutoExec" script, in order to increase the speed of the program and minimize memory requirements. The only remaining subroutines are those external to Linkway™.

An external program was written in C (compiled in Borland's Turbo C++) to run as a subroutine called by the IBM LinkWay™ script. This program provided an interface to the telephone keypad input device, and was also designed to work with a normal PC keyboard, for demonstration of the program outside of the "kiosk." The program also provided a timeout function, in order to prevent screen burnout on the monitor, and enabled input during the animation sequence. Another external program, borrowed from a previous version of the FTA, was used to play back sounds stored in files. This program was used without modification.

Attachment 1, to this Final Report, is the Operator's Manual. Three high density 3 1/2" disks, labelled Disk 1, 2, and 3, are enclosed in this FTA Proof-of-Concept Demonstration, Program Operator's Manual. Software installation instructions are included. Attachment 2, is the original Source Code of the FTA proof-of-concept program.

## **5.4 SUMMARY OF DEVELOPMENT**

The FTA was developed in pre-planned stages. An analysis of the initial FTA demonstration showed that it did not meet the intuitive level of graphic and non-verbal instructions required for a truly effective FTA. That recognition of the design faults of the original FTA lead to a more detailed and critical analysis and design of this proof-of-concept FTA demonstration.

## **5.5 EVALUATION APPROACH SELECTED**

A reiterative evaluation schedule was proposed and followed in the development of the FTA proof-of-concept demonstration.

The FTA evaluation initially was tested using students at the University of Central Florida drawn from the Spanish speaking community within the student body. The FTA was revised and edited after each scheduled evaluation. The large volume of visitors to IST and at conferences such as the InterService Industry Training Systems Conference provided an opportunity to demonstrate the FTA to a variety of foreign nationals and Spanish speaking personnel. Critical review of the FTA and feedback from users was constantly used to evaluate the FTA performance and make such changes as were needed.



The cooperation of the U.S. Customs and Immigration and Naturalization inspectors located at the Orlando International Airport (OIA) in Orlando, Florida was requested in this evaluation. With their help, the revised FTA was used to provide assistance to Spanish speaking travelers landing at the OIA, and FTA was revised and edited as required. Evaluation questionnaires were developed to elicit critical review of the FTA from travelers using the FTA.

## **6. EVALUATION**

### **6.1 HARDWARE EVALUATION**

The hardware suite of the FTA was determined by test and evaluation to be well suited for the design goals of the FTA. The computer selected for development was a Intel 80386SX based processor PC operating at 16 MHz. The FTA program was also tested on a 286 based PC AT clone. The recall time for the sound files was noticeably longer, to the FTA experienced development team, than the 386 PC. This delay was not considered excessive and in no way diminished the effectiveness or clarity of the speech files. The time delay was the only discernable difference, and the conclusion was that the 286 PC could be a suitable delivery platform. Further test and evaluation is necessary to determine if any significant difference exists in effectiveness between the 286 vs the 386 PC.

### **6.2 SOFTWARE EVALUATION**

The software developed for the FTA Proof-of-Concept demonstration was found to be robust and responsive to user demands. Those problems encountered early in the development of the FTA were reviewed, corrected and retested to write out the problems in successive modifications to the software program.

The combination of IBM Linkway™, Covox™ and Borland Turbo C++ proved to be an appropriate choice for the development of this Proof-of-Concept FTA demonstration project. That combination may not be the appropriate choice for full scale development of an FTA system. Issues such as networking, central file service, and expanded language files need to be defined by additional research and development.

### **6.3 SUMMARY OF EVALUATION**

Without exception, user reaction was favorable. The Proof-of-Concept FTA project succeeded in demonstrating the ability of the computer to deliver the responsive, self-paced, interactive instructions required in completing the necessary U. S. Customs CF6059B form.

The prototype 6059B form in Spanish was considered an improvement over the older forms, particularly by the INS personnel tasked in the Airport of the 90's with the responsibility to examine the U.S. Customs 6059B form for accuracy and completeness. INS personnel commented favorably on placing the signature on the front of the redesigned prototype 6059B.

Negative comments were received only on the fact that Spanish was the language selected for this FTA proof-of-concept demonstration project. Most Customs and INS personnel in Orlando listed the priority



of languages for FTA development as Portuguese followed closely by German, French, and Italian. The availability of fluent Spanish speaking personnel in the Orlando International Airport (Customs, INS and Airport personnel) reduced the need for a Spanish language based FTA system.

The FTA project evaluation was conducted with international travelers. The prototype 6059B could not legally be turned in and used as the official baggage declaration form. This required the evaluation to be limited to those travelers who agreed to assist IST evaluation personnel and fill out both forms. Most of those surveyed were experiencing real difficulty in filling out the CF6059B in Spanish. They all readily agreed to participate in this evaluation in return for translation assistance in filling out the real CF6059B for turn-in to the Customs Inspectors.

Spanish speaking travelers who were experiencing difficulty in completing the CF6059B were identified, then taken by native Spanish speaking IST evaluators to the FTA location, and closely observed using the FTA without assistance or prompting. The evaluators were instructed to only point to the FTA and tell the traveler to "follow the instructions on the screen". After the traveler completed the FTA prototype CF6059, they were then assisted in filling out the current CF6059B in order for them to pass through the INS and Customs inspections. While this system was awkward, it worked to fulfill a desired IST requirement to evaluate the FTA under "real international airport" conditions.

The evaluation of the FTA at OIA was limited by those "real international airport" conditions. The requirement to select Spanish speaking travelers who were experiencing difficulty in completing the CF6059B, take them to the FTA location, observe them using the FTA to complete the prototype CF6059, and then assist them in filling out the current CF6059B in order for them to pass through INS and Customs inspections was time consuming, and as mentioned above, awkward. Care had to be taken to prevent a negative bias from those selected to evaluate the FTA. INS personnel assisted significantly in this process by extending the "Flight Crew Only" lane access to the FTA users.

Samples of the completed CF6059Bs collected during this evaluation were "whited out" by Customs inspectors, prior to release to IST, as required by the provisions of the "Privacy Act". Sufficient observations were made of the FTA, while in use by Non-English speaking personnel, to validate and prove the concept of using the FTA to provide information and instructions.

Customs and INS Personnel observing or using the FTA recognized the potential of using the system to solve the language barrier problem in other languages as well as applying the FTA concept to other required forms. The ability to automate the pre-screening of passengers prior to arrival at a U.S International Airport such as OIA was a major topic of concern to all the Customs and INS personnel. The physical location of the FTA was a question which could not be resolved within this limited evaluation. Recommendations from Customs and INS personnel favored the placement of the FTA in the international departure areas in overseas airports or immediately in front of the INS primary inspection area in the "Airport of the 1990's" international arrivals area.

The general perception of all personnel involved in the FTA evaluation was that it would provide an automated ability to present the required assistance to those individuals who were incapable of reading and comprehending the CF6059B instructions. The experienced Customs and INS personnel who used the FTA provided critical review during the developmental process. They suggested its being used to



provide translation capabilities for the more exotic languages and for other Customs and Immigration forms. Portuguese was the language most mentioned in Orlando as a having the greatest potential for an FTA application in Orlando. The recent increase in direct flights from Brazil has placed a translation burden on the one INS inspector who is fluent in Portuguese.

## **7. FINDINGS**

The FTA is a step in the right direction. The anticipated future increase in volume of international air passenger traffic, particularly when viewed from a tourist destination such as Orlando, is a problem that awaits the application of available computer-based technology. The goal of prescreening all international travelers requires that the user information input process be automated. Automation of that input process cannot be achieved until a practical means is provided to present clear, unambiguous, instructions to the user in their own native language.

Appendix F offers a comparison between the Customs form 6059B and the INS forms I-94 or I-95. Eight (8) of the 11 questions asked on the I-94W (8 of 13 on the I-94) are asked and collected on the prototype 6059B. It should be noted that by sharing the necessary information to automate filling out both the required Customs and INS forms would require the capture and transmission of 744 bits or 93 bytes of digitally coded information, excluding the signature.

## **8. RECOMMENDATIONS**

The requirement to design a new 6059B form, limited the evaluation of the FTA under "real international airport" conditions. It is recommended that further evaluation of the FTA be done after acceptance and adoption of the prototype 6059B form scheduled for August of 1992.

A White Paper outlining an enhanced development program for the FTA has been provided to the U.S. Customs R&D Division. This project has been labeled the Enhanced Forms Translation Assistant (EFTA) project. This project incorporates the capabilities of the FTA to present instructions in a selected language with the ability to accept the handwritten entry of data using pen-based technology. This EFTA project offers to demonstrate the proof-of-concept of automating the handwritten data input of the user to complete the CF6059B and/or the I-94 & I-94W (See Attachment 4).

A White Paper outlining a full-scale development program has been provided to the U.S. Customs R&D Division. This project has been labeled the Automated Customs Clearing Examination and Pre-screening of Travelers (ACCEPT) project. This project serves as a testbed development program to provide a research and development base for automating the pre-screening of international travellers (See Attachment 5).

Both the EFTA and the ACCEPT concepts serve to further the state-of-the-art in automating the process of soliciting, accepting and managing, the data required from individuals seeking entry into the United States. Both of these concepts deserve favorable consideration.



It is recommended that the EFTA project be approved and funded in order to continue the research and development required to accurately assess the resource commitment required to automate the process of Customs Declarations.

It is recommended that the title to the computer equipment procured for the research and development of the Fixed Price FTA project be vested in the contractor, UCF, IST. The provisions of the Federal Acquisition Regulation (FAR) 52.245-2, Alternate Rule II are applicable since the cost of the computer procured was less than \$5,000, obtained with Contracting Officers's approval, and used in the conduct of applied research at a nonprofit institution of higher education. The computer equipment purchase request for \$2,600.00 was included in the original UCF/IST proposal which was subsequently approved and awarded as Item 11 in the purchase order. The equipment obtained via this FTA contract will be used in continued research in the area of computer-based forms translation and language instruction.

## 9. REFERENCES

Calderon, Xavier; Calderon, German; J. Peter Kincaid; Mullally, Daniel E.; Juge, Kenneth, Development of Computer Assisted Language Training Courseware (1990) Human Factors Society, Orlando Florida.

Galitz, W. O.; Handbook of Screen Format Design, (1985) 2nd Edition. Wellesley, MA: QED Information Sciences, Inc.

Gilmore, W. E. ; "Screen Structure and Content" Human Engineering Guidelines for the Evaluation and Assessment of Video Display Units. (1989) NUREG/ CR-4227. Washington, DC : U. S. Nuclear Regulatory Agency.

Editors; "Table XXXIX Standard Console Dimensions" Human Engineering Design Standards, MIL-STD-1472C (1984) Human Engineering Laboratory, Aberdeen, MD

## APPENDICES

- A U. S. Customs Declaration Form 6059B 1984 (Spanish)
- B U. S. Customs Declaration Form 6059B 1988 (Spanish)
- C U. S. Customs Declaration Form 6059B 1989 (English)
- D IST developed U. S. Customs Declaration Form 6059B (Prototype) (English) Initial
- E Comparison of CF6059B Prototype and INS Form I-94 and I-94W Questions
- F IST developed U. S. Customs Declaration Form 6059B (Prototype) (English) Final
- G IST developed U. S. Customs Declaration Form 6059B (Prototype) (Spanish) Final
- H English Instructions for completing the 6059B
- I Spanish Instructions for completing the 6059B
- J English Translation of the Spanish Instructions for completing the 6059B
- K Functional Specifications for the FTA

## ATTACHMENTS

1. Operator's Manual, FTA Proof-of-Concept Demonstration Program, with FTA Proof-of-Concept Demonstration Program on three 3 1/2" HD Disks\*
2. Source Code for the FTA Proof-of-Concept Demonstration Program
3. Video Tape, FTA Demonstration\* (VHS Format, 9 min., 30 sec.)
4. Enhanced FTA Project, White Paper
5. Project ACCEPT, White Paper

\* Included in original copy of Final Report only.



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## U. S. Customs Declaration Form 6059B 1984 (Spanish)



**BIENVENIDO  
A LOS  
ESTADOS UNIDOS**



DEPARTAMENTO DEL TESORO  
SERVICIO DE ADUANAS DE LOS ESTADOS UNIDOS

**DECLARACION DE ADUANAS**

FORM APPROVED  
OMB NO. 1515-0047

Todo viajero o jefe de familia que llega a los Estados Unidos debe facilitar la información siguiente (basta con una declaración por familia):

1. Nombre: \_\_\_\_\_  
 Apellido \_\_\_\_\_ Nombre \_\_\_\_\_ Inicial del segundo nombre \_\_\_\_\_
2. Numero de familiares que viajan con usted \_\_\_\_\_
3. Fecha de nacimiento: \_\_\_\_\_  
 Mes \_\_\_\_\_ Dia \_\_\_\_\_ Año \_\_\_\_\_
4. Línea aérea y número del vuelo: \_\_\_\_\_
5. Dirección en los Estados Unidos: \_\_\_\_\_
- 
6. Soy ciudadano de los Estados Unidos \_\_\_\_\_ SI \_\_\_\_\_ NO \_\_\_\_\_  
 En caso negativo, País: \_\_\_\_\_ ☐ ☐
7. Resido permanentemente en los Estados Unidos \_\_\_\_\_ SI \_\_\_\_\_ NO \_\_\_\_\_  
 En caso negativo, indique cuanto tiempo piensa permanecer en el país: \_\_\_\_\_ ☐ ☐
8. El propósito de mi viaje es o era: ☐ NEGOCIOS ☐ PLACER
9. Traigo (traemos) frutas, plantas, carnes, alimentos, tierra, pájaros, caracoles, u otros animales vivos, productos agrícolas, o he (hemos) estado en una finca o granja fuera de los Estados Unidos \_\_\_\_\_ SI \_\_\_\_\_ NO \_\_\_\_\_
10. Traigo (traemos) más de US\$10 000 en efectivo o en instrumentos monetarios, o su equivalente en moneda extranjera \_\_\_\_\_ SI \_\_\_\_\_ NO \_\_\_\_\_
11. El valor total de los artículos que he (hemos) comprado o he (hemos) adquirido asciende a (Véanse instrucciones al reverso bajo MERCANCIA, los visitantes solo deben indicar el valor de los regalos): \_\_\_\_\_ SI \_\_\_\_\_ NO \_\_\_\_\_

**FIRME AL DORSO ESTA DECLARACION  
DESPUES DE HABER LEIDO LA ADVERTENCIA**

(No escriba debajo de esta línea)

INSPECTOR'S NAME

**STAMP AREA**

**BADGE NO.**

Aveo sobre la reducción de trámites burocráticos la Ley de 1980 sobre la reducción de trámites burocráticos estous que desamos informos de las razones por las cuales recogimos esta informacón, la formo en que la jitaríamos y si está obligao a suministrarlos. Solicitamos esta informacón para cumplir con las leyes de los Estados Unidos sobre Aduanas, Agricultura y Moneda. La necesitamos para asegurarnos de que los viajeros cumplan con estas leyes y para determinar y recaudar las cantidades debidas por concepto de derechos e impuestos. Es obligacón enviar esta formuaro debidamente documentado.

Customs Form 6059B (102584) (Spanish)

## ADVERTENCIA

## PRODUCTOS AGRICOLAS

Para impedir la entrada de plagas peligrosas para la agricultura se imponen restricciones a la importación de los siguientes artículos: frutas, hortalizas, plantas y sus derivados, tierra, carnes y sus derivados, plátanos, caracoles y otros animales vivos o sus derivados. El no declarar todos estos artículos a un agente del Servicio de Aduanas o del Departamento de Agricultura puede dar lugar a la imposición de multas u otras sanciones.

## MONEDA E INSTRUMENTOS MONETARIOS

El transporte de moneda e instrumentos monetarios, sea cual fuere su cantidad, es lícito; no obstante, cuando seaque, o intente sacar, de los Estados Unidos o traerla, o intente traer, más de US\$10,000 (en moneda estadounidense o su equivalente en moneda extranjera, o una combinación de ambas) en moneda, cheques de viajero o instrumentos al portador, tales como giros bancarios, acciones o bonos, está obligado por la ley a cumplimentar el Formulario 4790 del Servicio de Aduanas de los Estados Unidos. También debe hacer la declaración si hace que otra persona le traiga la moneda o los instrumentos monetarios. EL NO HACER LA DECLARACION EXIGIDA O HACER DECLARACIONES FALSAS PUEDE OCASIONAR LA INCAUTACION DE LA MONEDA O DE LOS INSTRUMENTOS MONETARIOS Y LA IMPOSICION DE SANCIONES CIVILES O ENJUICIAMIENTO PENAL O AMBOS.

**MERCANCIA**

En el punto 11, los residentes de los Estados Unidos deben declarar el valor total de TODOS los artículos adquiridos en el extranjero (ya sean nuevos o usados, estén o no estén sujetos a impuestos, y se hayan obtenido mediante compra, regalo o de otra forma) que estén en su poder o en el de su familia en el momento de llegada. Los visitantes deben declarar en el punto 11 sólo el valor total de todos los regalos que traigan consigo.

Un funcionario del Servicio de Aduanas determinará la cantidad que tendrá que satisfacer por concepto de derechos de aduana. Normalmente, los residentes de los Estados Unidos están exentos de derechos de aduana hasta un total de US\$400 y los no residentes, hasta US\$100. A los residentes y no residentes se les suelen imponer derechos equivalentes a una tasa fija del 10% sobre primeros US\$1.000 en exceso de sus exenciones.

DESCRIPCION DE LOS ARTICULOS	PRECIO	PARA USO DEL SERVICIO DE ADUANAS
TOTAL		

**SI NECESITA MAS INFORMACION SOBRE LO QUE DEBE DECLARARSE,  
DIRIJASE A UN AGENTE DEL SERVICIO DE ADUANAS**

He leído las instrucciones anteriores y he declarado la verdad.

**FIRMA**

FECHA 1998-09-27-01

Customs Form 6059 (102584) (Back) (Spanish)

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## U. S. Customs Declaration Form 6059B 1988 (Spanish)



FORM APPROVED  
OMB NO. 1515-0041

Todo viajero o jefe de familia que llega a los Estados Unidos debe facilitar la información siguiente (basta con una declaración por familia):

1. Nombre: \_\_\_\_\_  
Apellido \_\_\_\_\_ Nombre \_\_\_\_\_ Inicial del segundo nombre \_\_\_\_\_
2. Fecha de nacimiento: \_\_\_\_\_ 3. Línea aérea y número del vuelo: \_\_\_\_\_  
Día \_\_\_\_\_ Mes \_\_\_\_\_ Año \_\_\_\_\_
4. Número de familiares que viajan con usted: \_\_\_\_\_
5. Dirección en los Estados Unidos: \_\_\_\_\_
- Ciudad: \_\_\_\_\_ Estado: \_\_\_\_\_
6. Soy ciudadano de los Estados Unidos \_\_\_\_\_ SI \_\_\_\_\_ NO \_\_\_\_\_  
En caso negativo, País: \_\_\_\_\_ ☐ ☐
7. Resido permanentemente en los Estados Unidos \_\_\_\_\_ SI \_\_\_\_\_ NO \_\_\_\_\_  
En caso negativo, indique cuánto tiempo piensa permanecer en el país: \_\_\_\_\_ ☐ ☐
8. El propósito de mi viaje es: a) ☐ NEGOCIOS ☐ PLACER
9. Traigo (traemos) frutas, plantas, carnes, alimentos, tierra, pájaros, caracoles, u otros animales vivos, productos agrícolas, o he (hemos) estado en una finca o granja fuera de los Estados Unidos. \_\_\_\_\_ SI \_\_\_\_\_ NO \_\_\_\_\_  
☐ ☐
10. Traigo (traemos) más de US\$10,000 en efectivo o en instrumentos monetarios, o su equivalente en moneda extranjera. \_\_\_\_\_ SI \_\_\_\_\_ NO \_\_\_\_\_  
☐ ☐
11. El valor total de los artículos que he (hemos) comprado o he (hemos) adquirido asciende a (Véanse instrucciones al reverso bajo MERCANCÍA): \_\_\_\_\_ \$

**FIRME AL DORSO ESTA DECLARACION  
DESPUES DE HABER LEIDO LA ADVERTENCIA**

(No escriba debajo de esta línea)

**STAMP AREA**

**BADGE NO.**

Aviso sobre la reducción de trámites burocráticos: la Ley de 1980 sobre la reducción de trámites burocráticos asegura que debemos informar de las razones por las cuales recogemos esta información. La forma en que la utilizaremos y si está obligado a suministrarla. Solicitamos esta información para cumplir con las leyes de los Estados Unidos sobre Aduanas, Agricultura y Moneda. La necesitamos para asegurarnos de que los viajeros cumplen con estas leyes y para determinar y reducir las cantidades debidas por concepto de derechos e impuestos. Es obligatorio entregar esta información cuidadosamente cumplimentada.

El contrabando o la importación ilícita de sustancias controladas, sea cual fuere su cantidad, constituyen una infracción de las leyes de los Estados Unidos.

Se puede verificar la exactitud de su declaración por medio de un interrogatorio y de un registro personal

Para impedir la entrada de plagas peligrosas para la agricultura se imponen restricciones a la importación de los siguientes artículos: frutas, hortalizas, plantas y sus derivados, tierra, carnes y sus derivados, pájaros, caracoles y otros animales vivos o sus derivados. El no declarar todos estos artículos a un agente del Servicio de Aduanas o del Departamento de Agricultura puede dar lugar a la imposición de multas u otras sanciones.

El transporte de moneda o instrumentos monetarios, sea cual fuere su cantidad, es lícito, no obstante, cuando saque, o esté a punto de sacar, de los Estados Unidos o traiga, o esté a punto de traer, mas de US\$10 000 (en moneda estadounidense o su equivalente en moneda extranjera, o una combinación de ambas) en moneda, cheques de viajero o instrumentos al portador, tales como gros bancanos, acciones o bonos, esta obligado por la ley a declararlos en el Formulario 4790 del Servicio de Aduanas de los Estados Unidos. También debe hacer la declaración si hace que otra persona la traiga la moneda o los instrumentos monetarios. **EL NO HACER LA DECLARACION EXIGIDA O HACER DECLARACIONES FALSAS PUEDE OCASIONAR LA INCARCACION DE LA MONEDA O DE LOS INSTRUMENTOS MONETARIOS Y LA IMPOSICION DE SANCIONES CIVILES O ENJUICIAMIENTO PENAL O AMBOS.**

En el punto 11, los residentes de los Estados Unidos deben declarar el valor total de TODOS los artículos adquiridos en el extranjero (ya sean nuevos o usados, estén o no estén sujetos a impuestos, y se hayan obtenido mediante compra, regalo o de otra forma) incluso aquellos adquiridos en las tiendas con franquicia aduanera en los Estados Unidos o en el extranjero, que estén en su poder o en el de su familia en el momento de llegada. Los visitantes deben declarar en el punto 11 el valor total de todos los regalos y artículos comerciales, incluso muestras, que traigan consigo.

Un funcionario del Servicio de Aduanas determinará la cantidad que tendrá que satisfacer por concepto de derechos de aduana. Normalmente, los residentes de los Estados Unidos están exentos de derechos de aduana hasta un total de US\$400 por los artículos que traen consigo, y los no residentes, hasta US\$100. A los residentes y a no residentes se les suelen imponer derechos equivalentes a una tasa fija del 10% sobre los primeros US\$1.000 en exceso de sus exenciones.

Si el valor de las mercaderías declaradas en el punto 11 es superior a US\$1.400 por persona, enumere TODOS los artículos en el espacio reservado mas abajo, e indique el precio pagado en dólares de los EE UU. o, en el caso de regalos, su valor razonable al por menor

[illegible]

**SI NECESITA MAS INFORMACION SOBRE LO QUE DEBE DECLARARSE,  
DIRIJASE A UN AGENTE DEL SERVICIO DE ADUANAS**

He leído las instrucciones anteriores y he declarado la verdad.

**FIRMA**

FECHA (dd/mm/aa)

Customs Form 6059B (042988) (Back) (Spanish)

U.S.G.P.O. 1989 645-016



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## U. S. Customs Declaration Form 6059B 1989 (English)

# WELCOME TO THE UNITED STATES



DEPARTMENT OF THE TREASURY  
UNITED STATES CUSTOMS SERVICE

FORM APPROVED  
OMB NO. 1575-0041

## CUSTOMS DECLARATION

19 CFR 122.27, 148.12, 148.13, 148.110, 148.111

Each arriving traveler or head of family must provide the following information (only ONE written declaration per family is required):

1. Name: \_\_\_\_\_  
Last First Middle Initial
2. Date of Birth: \_\_\_\_\_ 3. Airline/Flight \_\_\_\_\_  
Day Month Year
4. Number of family members traveling with you \_\_\_\_\_
5. U.S. Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_
6. I am a U.S. Citizen YES NO  
If No, ☐ ☐  
Country: \_\_\_\_\_
7. I reside permanently in the U.S. YES NO  
If No, ☐ ☐  
Expected Length of Stay: \_\_\_\_\_
8. The purpose of my trip is or was ☐ BUSINESS ☐ PLEASURE
9. I am/we are bringing fruits, plants, meats, food, YES NO  
soil, birds, snails, other live animals, farm ☐ ☐  
products, or I/we have been on a farm or ranch  
outside the U.S.
10. I am/we are carrying currency or monetary YES NO  
instruments over \$10,000 U.S. or foreign ☐ ☐  
equivalent.
11. The total value of all goods I/we purchased or YES NO  
acquired abroad and am/are bringing to the U.S. ☐ ☐  
is (see instructions under Merchandise on reverse  
side): \_\_\_\_\_ \$

**▶ MOST MAJOR CREDIT CARDS ACCEPTED.**  
**SIGN ON REVERSE SIDE AFTER YOU READ WARNING.**

(Do not write below this line.)

INSPECTOR'S NAME

**STAMP AREA**

**BADGE NO.**

**Paperwork Reduction Act Notice:** The Paperwork Reduction Act of 1980 says we must tell you why we are collecting this information, how we will use it and whether you have to give it to us. We ask for this information to carry out the Customs, Agriculture, and Currency laws of the United States. We need it to ensure that travelers are complying with these laws and to allow us to figure and collect the right amount of duties and taxes. Your response is mandatory.

Statement required by 5 CFR 1320.21: The estimated average burden associated with this collection of information is 3 minutes per respondent or recordkeeper depending on individual circumstances. Comments concerning the accuracy of this burden estimate and suggestions for reducing this burden should be directed to U.S. Customs Service, Paperwork Management Branch, Washington, DC 20229, and to the Office of Management and Budget, Paperwork Reduction Project (1545-0041), Washington, DC 20503.

Customs Form 6059B (092089)

## WARNING

**The smuggling or unlawful importation of controlled substances regardless of amount is a violation of U.S. law.**

Accuracy of your declaration may be verified through questioning and physical search.

## AGRICULTURAL PRODUCTS

To prevent the entry of dangerous agricultural pests the following are restricted: Fruits, vegetables, plants, plant products, soil, meats, meat products, birds, snails, and other live animals or animal products. Failure to declare all such items to a Customs/Agriculture Officer can result in fines or other penalties.

## CURRENCY AND MONETARY INSTRUMENTS

The transportation of currency or monetary instruments, regardless of amount, is legal; however, if you take out of or bring into (or are about to take out of or bring into) the United States more than \$10,000 (U.S. or foreign equivalent, or a combination of the two) in coin, currency, travelers checks or bearer instruments such as money orders, checks, stocks or bonds, you are required by law to file a report on a Form 4790 with the U.S. Customs Service. If you have someone else carry the currency or instruments for you, you must also file the report. FAILURE TO FILE THE REQUIRED REPORT OR FALSE STATEMENTS ON THE REPORT MAY LEAD TO SEIZURE OF THE CURRENCY OR INSTRUMENTS AND TO CIVIL PENALTIES AND/OR CRIMINAL PROSECUTION.

## MERCHANDISE

In Item 11, **U.S. residents** must declare the total value of ALL articles acquired abroad (whether new or used, whether dutiable or not, and whether obtained by purchase, as a gift, or otherwise), including those purchases made in DUTY FREE stores in the U.S. or abroad, which are in their or their family's possession at the time of arrival. **Visitors** must declare in Item 11 the total value of all gifts and commercial items, including samples they are bringing with them.

The amount of duty to be paid will be determined by a Customs officer. U.S. residents are normally entitled to a duty free exemption of \$400 on those items accompanying them; non-residents are normally entitled to an exemption of \$100. Both residents and non-residents will normally be required to pay a flat 10% rate of duty on the first \$1,000 above their exemptions.

If the value of goods declared in Item 11 EXCEEDS \$1,400 PER PERSON, then list ALL articles below and show price paid in U.S. dollars or, for gifts, fair retail value. If additional space is needed, continue on another Customs Form 6059B.

DESCRIPTION OF ARTICLES	PRICE	CUSTOMS USE
TOTAL		

**IF YOU HAVE ANY QUESTIONS ABOUT WHAT MUST BE REPORTED OR DECLARED ASK A CUSTOMS OFFICER.**

*I have read the above statements and have made a truthful declaration.*

**SIGNATURE**

DATE (Day/Month/Year) \_\_\_\_\_

Customs Form 6059B (092089) (Back)



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# APPENDIX F

## Comparison of CF6059B Prototype and INS Form I-94 and I-94W Questions

Customs Service	Immigration and Naturalization Service
1. Family Name <input type="text"/>	1. & 14. (I-94 & 94W) Family Name <input type="text"/>
2. First (Given) Name <input type="text"/>	2. & 15. (I-94 & 94W) First (Given) Name <input type="text"/>
3. Middle Initial <input type="text"/>	
4. Birth Date (Day / Month / Year) <input type="text"/>	3. & 16. (I-94 & 94W) Birth Date (Day / Month / Year) <input type="text"/>
5. Airline and Flight Number <input type="text"/>	7. (I-94 & 94W) Airline and Flight Number <input type="text"/>
7. (a.) Country of Citizenship <input type="text"/>	4. & 17. (I-94 & 94W) Country of Citizenship <input type="text"/>
7. (b.) Country where you live <input type="text"/>	8. (I-94 & 94W) Country where you live <input type="text"/>
8. (a.) U. S. Address (Number and Street) <input type="text"/>	10. & 12. (I-94 & 94W) U. S. Address (Number and Street) <input type="text"/>
8. (b.) City <input type="text"/>	11. & 13. (I-94 & 94W) (a.) City <input type="text"/>
8 (c.) State <input type="text"/>	11. & 13. (I-94 & 94W) (b.) State <input type="text"/>
6. Number of Family Members Traveling with you <input type="text"/>	5. (I-94 & 94W) Sex <input type="text"/>
9.(a) Countries visited on this trip prior to U. S. arrival <input type="text"/>	6. (I-94 & I-94W) Passport Number <input type="text"/>
9.(b) Countries visited on this trip prior to U. S. arrival <input type="text"/>	9. (I-94 & I-94W) City where you boarded <input type="text"/>
9.(c) Countries visited on this trip prior to U. S. arrival <input type="text"/>	(10.) (I-94) City where visa was issued <input type="text"/>
9.(d) Countries visited on this trip prior to U. S. arrival <input type="text"/>	(11.) (I-94).Date Visa issued (Day / Mo / Yr) <input type="text"/>
10. The purpose of My trip is or was: (Check one or both boxes, if applicable) Business <input type="checkbox"/> Personnel <input type="checkbox"/>	
11. I am (We are) bringing fruits, plants, meats, food, soil, birds, snails, other live animals, farm products, or, have been on a farm or ranch outside the U.S.: Yes <input type="checkbox"/> No <input type="checkbox"/>	
12. I am (We are) carrying currency or monetary instruments over \$10,000.00 U.S., or foreign equivalent: Yes <input type="checkbox"/> No <input type="checkbox"/>	
13. I have (We have) commercial merchandise: U.S., or foreign: (Check one box only) Yes <input type="checkbox"/> No <input type="checkbox"/>	
14. The total value of all the goods, including commercial merchandise, I/we purchased or acquired abroad and am/are bringing to the U.S. is: \$ <input type="text"/> (If you have nothing to declare, write \$-0- in the space provided above) See instructions on reverse of this form under MERCHANDISE and use the space provided to list all the items you must declare. <input type="text"/>	
Signature <input type="text"/>	
Date (day / month / year) <input type="text"/>	



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## IST developed U. S. Customs Declaration Form 6059B (Prototype) (English) Final

**WELCOME  
TO THE  
UNITED STATES**

## WARNING

The unlawful importation of controlled substances (narcotics, chemicals, prescription medicines if not accompanied by a prescription, etc.) regardless of amount is a violation of U.S. law.



FORM APPROVED  
OMB NO. 1515-0047

## 19 CFR 122.27, 148.12, 148.110, 148.111

Each arriving traveler or responsible family member must provide the following information (only ONE written declaration per family is required):

**7. Family Name**

2. First (Given) Name	3. Middle Initial	4. Birth Date
		(day month year)

5. Airline/Flight. No. or Vessel Name	6. No. of Family Members traveling with You
---------------------------------------	---------------------------------------------

7. (a.) Country of Citizenship	7. (b.) Country of Residence
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8. (a.) U. S. Address (Street Number / Hotel / Mailing address in U. S.)

8. (b) U. S. Address (City)	8. (c) U. S. Address (State)
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9. Countries visited on this trip prior to U. S. Arrival

a. b.

c. \_\_\_\_\_ d. \_\_\_\_\_

10. The purpose of my trip is or was:  
(Check one or both boxes, if applicable) Business ☐ Personal ☐

11. I am (We are) bringing fruits, plants, meats, food, soil, birds, snails, other live animals, farm products, or; have been on a farm or ranch outside the U.S.: Yes ☐ No ☐

12. I am (We are) carrying currency or monetary instruments over \$10,000.00 U. S., or foreign equivalent: Yes ☐ No ☐

13. I have (We have) commercial merchandise:  
U. S. , or foreign: (Check one box only) Yes ☐ No ☐

14. The total value of all goods, including commercial merchandise, I/We purchased or acquired abroad and am/are bringing to the U. S. is:                      \$                       
U. S. Dollars

(If you have nothing to declare, write \$ -0- in the space provided above)  
(See the instructions on reverse of this form under MERCHANDISE and use the space provided to list all the items you must declare)

**SIGN BELOW AFTER READING WARNING ON REVERSE**

I have read the warning on the reverse and have made a truthful declaration.

Signature \_\_\_\_\_

Date (day / month / year)

U. S Customs use only - Do not write below this line - U. S Customs use only

INSPECTOR'S BADGE NUMBER

**STAMP AREA**

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Customs Form 8059B (Protections)

Customs Form 6059B (Prototype)

## AGRICULTURAL PRODUCTS

To prevent the entry of dangerous agricultural pests, the following are restricted: Fruits, vegetables, plants, plant products, soil, meats, meat products, birds, snails, and other live animals or animal products. Failure to declare all such items to a Customs/Agricultural officer can result in penalties and the items may be subject to seizure.

## CURRENCY AND MONETARY INSTRUMENTS

The transportation of currency or monetary instruments, regardless of amount, is LEGAL; however, if you take out of or bring into the United States more than \$10,000 (U.S. or foreign equivalent, or a combination of the two) in coin, currency, traveler's checks or bearer instruments such as money orders, personal or cashier's checks, stocks or bonds, you are required BY LAW to FILE a report on Form 4790 with the U.S. Customs Service. If you have someone else carry the currency or instruments for you, you must also file the report. FAILURE TO FILE THE REQUIRED REPORT OR TO REPORT THE TOTAL AMOUNT YOU ARE CARRYING MAY LEAD TO SEIZURE OF ALL THE CURRENCY OR INSTRUMENTS, AND MAY SUBJECT YOU TO CIVIL PENALTIES AND/OR CRIMINAL PROSECUTION.

## MERCHANDISE

**U.S. RESIDENTS** must declare in Item 14, the total value of ALL articles, including commercial goods and samples, they acquired abroad (whether new or used; dutiable or not; and whether obtained by purchase, received as a gift, or otherwise), including those articles purchased in DUTY FREE STORES IN THE U.S. OR ABROAD, which are in their possession at the time of arrival.

Articles which you acquired on this trip, mailed from abroad, (other than those articles acquired in insular possessions and various Caribbean Basin countries) are fully dutiable upon their arrival in the U.S.

**VISITORS (NON-RESIDENTS)** must declare in Item 14, the total value of all articles intended for others and all items intended to be sold or left in the U.S. This includes all gifts and commercial items or samples. (EXCEPTION: Your own personal effects, such as clothing, personal jewelry and camera equipment, luggage, etc., need not be declared.)

The amount of duty to be paid will be determined by a Customs Officer. Please describe all articles by their common names and material. For example: MAN'S WOOL KNIT SWEATER; PEWTER CANDLE STICK HOLDERS; DIAMOND AND GOLD RING; etc. Also, please have all your receipts ready to present to the Customs officer, if requested. By providing this information and the receipts, you will help to facilitate the inspection process.

**IF YOU HAVE ANY QUESTIONS ABOUT WHAT MUST BE REPORTED OR DECLARED ASK A CUSTOMS OFFICER**

DESCRIPTION OF ARTICLES	V A L U E	CUSTOMS USE
TOTAL		

**Paperwork Reduction Act Notice:** The Paperwork Reduction Act of 1980 says we must tell you why we are collecting this information, how we will use it and whether you have to give it to us. We ask for this information to carry out the Customs, Agriculture, and Currency laws of the United States. We need it to ensure that travelers are complying with these laws and to allow us to figure and collect the right amount of duties and taxes. Your response is mandatory.

Statement required by 5 CFR 1320.21: The estimated average burden associated with this collection of information is 3 minutes per respondent or record keeper depending on individual circumstances. Comments concerning the accuracy of this burden estimate and suggestions for reducing this burden should be directed to U.S. Customs Service, Paperwork Management Branch, Washington, DC 20293, and to the Office of Management and Budget, Paperwork Reduction Project (1515-0041), Washington, DC 20503.



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## IST developed U. S. Customs Declaration Form 6059B (Prototype) (Spanish) Final

APHIS/FWS USE ONLY	<h1 style="margin: 0;">BIENVENIDO A LOS ESTADOS UNIDOS</h1>	CUSTOMS USE ONLY
<b>DEPARTAMENTO DEL TESORO</b> <b>SERVICIO DE ADUANAS DE LOS ESTADOS UNIDOS</b>		
FORM APPROVED OASIS REG. 1010-0011		
<h2 style="margin: 0;">DECLARACION DE ADUANAS</h2> <p style="margin: 0; font-size: small;">18 CFR 122.27, 148.12, 148.118, 148.111</p>		
<p style="margin: 0; font-size: small;">Todo viajero o jefe de familia que llega a los Estados Unidos debe facilitar la información siguiente (basta con una declaración por familia)</p>		
<p style="margin: 0;"><b>1. Apellido</b></p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>		
<p style="margin: 0;"><b>2. Primer nombre</b></p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<p style="margin: 0;"><b>3. Inicial del segundo nombre</b></p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<p style="margin: 0;"><b>4. Fecha de nacimiento</b></p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>
<p style="margin: 0;"><b>5. Aerolínea/ No. de vuelo, o nombre del barco</b></p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>		<p style="margin: 0;"><b>6. No. de familiares que viajan con Ud.</b></p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>
<p style="margin: 0;"><b>7. (a.) País de ciudadanía</b></p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<p style="margin: 0;"><b>7. (b.) País de residencia</b></p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>	
<p style="margin: 0;"><b>8. (a) Dirección en EE. UU. (No. de calle/ hotel)</b></p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>		
<p style="margin: 0;"><b>8. (b) Dirección en EE. UU. (Ciudad)</b></p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>		<p style="margin: 0;"><b>8. (c) Dirección en EE. UU. (Estado)</b></p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>
<p style="margin: 0;"><b>9. Países visitados en este viaje, antes de llegar a los EE. UU.</b></p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%; border: 1px solid black; height: 20px;"></div> <div style="width: 45%; border: 1px solid black; height: 20px;"></div> </div>		
<p style="margin: 0;"><b>a.</b></p>	<p style="margin: 0;"><b>b.</b></p>	
<p style="margin: 0;"><b>c.</b></p>	<p style="margin: 0;"><b>d.</b></p>	
<p style="margin: 0;"><b>10. El propósito de mi viaje es o era:</b>  (Marque uno o ambos espacios, si es aplicable) <b>Negocios</b> <input type="checkbox"/> <b>Personal</b> <input type="checkbox"/></p>		
<p style="margin: 0;"><b>11. Traigo (Traemos) frutas, plantas, carnes, alimentos, tierra, caracoles, u otros animales vivos, productos agrícolas, o: he (hemos) estado en una finca o granja fuera de los EE. UU. :</b> <span style="float: right;"><b>Si</b> <input type="checkbox"/> <b>No</b> <input type="checkbox"/></span></p>		
<p style="margin: 0;"><b>12. Traigo (Traemos) más de US \$10,000.00 en efectivo o en instrumentos monetarios, o su equivalente en moneda extranjera:</b> <span style="float: right;"><b>Si</b> <input type="checkbox"/> <b>No</b> <input type="checkbox"/></span></p>		
<p style="margin: 0;"><b>13. Tengo (Tenemos) mercancía comercial de los EE. UU. o extranjera: (Marque sólo un espacio)</b> <span style="float: right;"><b>Si</b> <input type="checkbox"/> <b>No</b> <input type="checkbox"/></span></p>		
<p style="margin: 0;"><b>14. El valor total de los artículos que he (hemos) comprado o adquirido, y que traigo (traemos) a los EE. UU., asciende a:</b></p> <div style="display: flex; align-items: center; justify-content: center;"> <div style="border: 1px solid black; padding: 5px; margin-right: 10px;">\$</div> <div style="border: 1px solid black; flex-grow: 1; height: 20px;"></div> </div> <p style="margin: 0; text-align: right; font-size: small;">Dólares de EE. UU.</p>		
<p style="margin: 0; font-size: small;">(Si no tiene nada que declarar, escriba \$ -0- en el espacio dado) (Véanse las instrucciones al dorso de esta declaración, bajo <b>MERCANCIA</b>)</p>		
<p style="margin: 0;"><b>FIRMA ABAJO, DESPUES DE HABER LEIDO LA ADVERTENCIA AL DORSO DE ESTA DECLARACION</b></p>		
<p style="margin: 0; font-size: small;">He leído la advertencia al dorso de esta declaración, y he declarado la verdad.</p>		
<div style="display: flex; justify-content: space-between; font-size: small;"> <div>U. S. Customs use only - No escriba debajo de esta línea - U. S. Customs use only</div> <div>INSPECTOR'S BADGE NUMBER</div> <div>STAMP AREA</div> </div>		

## ADVERTENCIA

Toda persona está sujeta a ser interrogada. La persona y sus pertenencias también están sujetas a ser revisadas.

El contrabando o la importación ilícita de sustancias controladas (narcóticos, químicos, medicinas con prescripción médica, sin la prescripción), sea cual fuere su cantidad, constituyen una infracción de las leyes de los Estados Unidos.

### PRODUCTOS AGRICOLAS

Para impedir la entrada de plagas peligrosas para la agricultura, se imponen restricciones a la importación de los siguientes artículos: frutas, hortalizas, plantas y sus derivados, tierra, carne y sus derivados, pájaros, caracoles y otros animales vivos e sus derivados. El no declarar estos artículos a un agente del Servicio de Aduanas del Departamento de Agricultura puede dar lugar a la imposición de multas y otras sanciones.

## MONEDA E INSTRUMENTOS MONETARIOS

El transporte de monedas o instrumentos monetarios, sea cual fuera su cantidad, es LEGAL; no obstante, cuando se trata, o está a punto de sacar, de los Estados Unidos o traiga, o está a punto de traer, más de US \$10,000 (en moneda estadounidense o su equivalente en moneda extranjera, o una combinación de ambas) en moneda, cheques de viajero o instrumentos al portador, tales como giro bancarios, acciones o bonos, está obligado por LEY a DECLARARLOS en el Formulario 4790 del Departamento de Hacienda, al salir o al entrar al país. Si no se declara, la declaración al salir, que otra persona le traiga la moneda o los instrumentos monetarios. El no hacer la declaración obliga a hacer declaraciones futuras puede constituir la incurrir en la confiscación de la moneda o de los instrumentos monetarios y la imposición de sanciones civiles o castigos penales o ambas.

**MERCANCIA**

**RESIDENTES DE LOS EE. UU.** deben declarar en el punto 14, el valor total de TODOS los artículos adquiridos en el extranjero (ya sean nuevos o usados, estén o no sujetos a impuestos, y se hayan obtenido mediante compra, regalo o de otra forma). Incluso aquellos artículos adquiridos en las tiendas con franquicia aduanera en los EE. UU. o en el extranjero, que estén en su poder, o en el de su familia, en el momento de legarla.

Los artículos adquiridos en éste viaje, mandados del exterior, (excepto aquellos artículos adquiridos en posesiones insulares o cualquier otro país del Caribe), deben ser declarados a su llegada a los EE. UU.

**VISITANTES (NO RESIDENTES)** deben declarar en el punto 14, el valor total de TODOS los artículos cuyo propósito es para otros, y aquellos que van a ser vendidos o dejados en los EE. UU. Esto incluye regalos y artículos comerciales, incluso muestras que traigan consigo. (EXCEPCIÓN: Sus efectos personales, tales como ropa, joyas personales, equipo de cámara, equipaje, etc., no necesitan ser declarados.)

Un funcionario del Servicio de Aduanas determinará la cantidad que tendrá que satisfacer por concepto de derechos de aduana. Por favor, describa todos los artículos por su nombre común y su material. Por ejemplo: SUETER DE LAMA PARA HOMBRES; CANDELABRO DE PIEDRO; ANILLO DE ORO Y DIAMANTE, etc. También, favor de tener todos los recibos listos para presentar al funcionario del Servicio de Aduanas, si son requeridos por tal. Facilitando ésta información, y los recibos requeridos, facilitará el proceso de inspección.

**SI NECESITA MAS INFORMACION SOBRE LO QUE DEBE DECLARARSE,  
DIRIJASE A UN AGENTE DEL SERVICIO DE ADUANAS**

DESCRIPCION DE LOS ARTICULOS	VALOR	PARA USO DEL SERVICIO DE ADUANAS
TOTAL		

**Aviso sobre la reducción de trámites burocráticos:** La Ley de 1980 sobre la reducción de trámites burocráticos establece que debemos informarlo de los cambios por las causas reconocidas ante información, la forma en que la información y el uso de la información, la información y el uso de la información, la información y el uso de la información. Estados Unidos sobre Aduanas, Agricultura y Comercio. La información para el comercio de los países que visiten cumplir con estas leyes y para determinar y recordar las cantidades debidas por concepto de derechos e impuestos. Es obligatorio entregar esta formulario debidamente cumplido.

Statement required by 8 C.F.R. 1320.21: The estimated average burden associated with this collection of information is 3 minutes per respondent or record keeper depending on individual circumstances. Comments concerning the accuracy of this burden estimate and suggestions for reducing this burden should be directed to U.S. Customs Service, Paperwork Management Branch, Washington, DC 20229, and to the Office of Management and Budget, Paperwork Reduction Project (1515-0041), Washington, DC 20503.

Customs Form 6059B (Prototype)(Spanish)



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## APPENDIX H

### English Instructions for completing the 6059B

#### GENERAL INSTRUCTIONS

- Read and listen carefully to the given instructions. Press the numbered bottom, next to the question, given on screen.

1. Write your last name or family name.
2. Write your first name.
3. Write the initial of your middle name. If you don't have a middle name, write the initials NMI in the given space.
4. Write your date of birth, in the form (DD /MM /YY).
5. Write the name of the vessel, or airline and include the flight number after it. You will be able to find this information in your plane ticket.
6. Write the number of family members that are traveling with you. Do not include yourself. The family members that you have to include, are those who are under your responsibility (wife, children, the elderly, etc...). If another adult in your family is traveling with you, this person will have to fill out a form, individually.
7. a.) Write the Country of Citizenship. b.) Country of Residence in the given space. These countries could be the same or different. You are considered to be a U.S. resident if you possess a Green Card (work permit).
8. a.) Write the address where you expect to stay, during your visit in the U.S. (This can be a house, a hotel, apartment, etc...). b.) Write the name of the city where you expect to stay. c.) Write the initials of the state where you expect to stay. If you are planning to travel around the U.S., write down the address of the place where are planning to stay the longest. If you are an international student, write down the name of the school which you are going to attend, and its address.
9. Make a list of the countries that you visited prior to arriving to the U.S. If you are only coming from your home country or from the country where you live, write the name of this country in the first space.
10. Mark in the given spaces if the purpose of this trip is business or personal. You should mark the box personal if the purpose of this trip is tourism (pleasure) or if you are an international student.
11. Mark yes, if you are bringing fruits, plants, meat, food, soil, birds, snails, other live animals, farm products, or you have been on a ranch or farm outside the U.S. before arriving in the U.S.
12. Mark yes, if you are bringing more than \$10,000, in the sum of currency, checks, stocks or bonds, or any other type of monetary instruments; if you are bringing the foreign equivalent for that amount of money or the combination of the two.



13. Mark in this space if you are bringing commercial merchandise with you. Commercial merchandise, is that merchandise that you are bringing for the purpose of trade. This merchandise could have been bought in the U.S, or any foreign country.

14. If you are a U.S Resident; write the total value of all the goods, including commercial merchandise, and articles that you bought in a duty free shop, and that you acquired abroad. Include the value of all articles purchased and even those articles received as a gift. Write the description of every article, by their common name. Write down the price of the article, and finally write down the total value of the prices of each article, and put this total on the back of this form. If you don't have anything to declare write \$ -0- in the space to the right. If you are a visitor, you should write down the value of all the goods that you brought to this country intended for commercial use, or for gifts.

**Signature Instructions.**

After reading, and understanding the instructions to fill out this form, sign the form in the given space and date it, in the form (DD /MM /YY ).

## **APPENDIX I**

### **Spanish instructions for completing the 6059B**

#### **INSTRUCCIONES GENERALES**

-Lea y escuche atentamente las instrucciones. Oprima el botón enumerado al lado de la pregunta, que se encuentra en la pantalla.

1. Escriba su apellido paterno, o el apellido de su familia.
2. Escriba su primer nombre.
3. Escriba la inicial de su segundo nombre. Si usted no tiene segundo nombre, escriba las iniciales NMI en el espacio dado.
4. Escriba en este espacio, su fecha de nacimiento en la forma (DD /MM /AA), (Día/ Mes/ Año).
5. Escriba el nombre de la línea aérea, o barco con el que usted está viajando, y seguidamente escriba el número de su vuelo. Esta información la puede encontrar en su boleto o pasaje aéreo.
6. Escriba el número de familiares que viajan con usted. No se incluya ud. en este número. Los familiares que debe incluir son las personas que están a su cargo (Esposa, niños, sobrinos menores de edad, ancianos). Si otra persona adulta, de su misma familia viaja con usted, (Cuñada/o, o un hermano adulto, quien es responsable de sí mismo) esa persona tiene que llenar un formulario individualmente.
7. a.) Escriba en este espacio, el país de dónde usted tiene ciudadanía. b.) Escriba en este espacio el país de donde usted tiene residencia. Estos dos países pueden ser distintos o iguales. Usted es considerado un residente de los Estados Unidos, si usted tiene un permiso para trabajar en este país (green card).
8. a.) Escriba aquí la dirección dónde usted piensa permanecer durante su estadía en este país (Puede ser un hotel o casa de familia). b.) Escriba la ciudad dónde usted piensa permanecer. c) Escriba las iniciales del estado dónde piensa permanecer. Si usted piensa viajar dentro de los Estados Unidos, escriba la última dirección donde usted se quedará. Si usted es un estudiante internacional, escriba en este espacio la Universidad o Colegio que usted atenderá y su dirección.
9. Escriba una lista de los países que usted visitó antes de llegar a los Estados Unidos. Si usted solo viene de su país natal o de dónde usted vive, escriba el nombre de este país en el primer espacio.
10. Marque en el espacio apropiado si el propósito de su viaje es de negocios o personal. Si el propósito de su viaje es turismo, marque el espacio correspondiente a personal. Si usted es un estudiante internacional, marque el espacio correspondiente a personal.
11. Marque SI, si usted trae frutas frescas, plantas naturales, semillas, pájaros, carne o cualquier animal vivo; o ha estado en una granja o finca poco tiempo antes de entrar a este país.



12. Marque SI, si usted trae más de \$10,000 en la suma de dinero en efectivo, cheques, bonos, giros bancarios, o acciones, en cualquier combinación de estos o cualquier otro tipo de instrumento monetario; o si trae el equivalente en dólares de su moneda nacional.

13. Marque en este espacio si trae mercancía consigo mismo. Se considera como mercancía cualquier producto que usted traiga a este país con el propósito de usarlo para el comercio. Esta mercadería puede haber sido comprada en los Estados Unidos, o en el extranjero.

14. Si usted es un residente de los Estados Unidos; escriba el valor total de todos los artículos que usted trae, incluyendo mercadería que usted obtuvo en las tiendas libre de impuestos (Duty free), o que la haya adquirido en el extranjero. Incluya el valor de todos los artículos adquiridos, incluyendo aquellos recibidos como regalos. La descripción de los precios de cada artículo, escríbala en el reverso de éste formulario. Escriba el valor total de tales artículos en el espacio dado. Si no tiene nada que declarar escriba \$ -0- en el espacio a la derecha. Si usted es un visitante, escriba el valor total de los artículos que trae a este país, cuyo propósito es para el comercio, o todos aquellos artículos que usted piensa dejar en este país como regalo a un pariente o amigo.

#### **Instrucciones para la firma**

Después de haber leído y entendido las instrucciones, firme el formulario y escriba la fecha del día de hoy en la forma (DD /MM /AA).

## APPENDIX J

### English translation of Spanish instructions for completing the 6059B

#### GENERAL INSTRUCTIONS

- Read and listen carefully to the instructions. Press the button beside each question to receive oral and written instructions.

1. Write your father's last name, or the last name of your family.
2. Write your first name.
3. Write the initial of your second name. If you don't have a second name, write the initials NMI in the given space.
4. Write in this space your date of birth, in the form (DD /MM /YY) (Day/ Month/ Year).
5. Write the name of the airline, or the boat (vessel) in which you are traveling, include the flight number after it. This information can be found on your ticket.
6. Write the number of family members that are traveling with you. Do not include yourself in this number. The family members that you have to include, are those persons of whom you are in charge (wife, children, the elderly, etc...). If another adult person, of your same family is traveling with you, this person will have to fill out a form, individually.
- 7 a.) Write the Country of Citizenship. b.) Write the Country of Residence in the given space. These countries could be the same or different. You are considered to be a U.S. resident if you are allowed to work in this country (green card).
8. a.) Write the address where you expect to stay, during your visit in the U.S. (This can be a house, a hotel, apartment, etc...). b.) Write the initials of the state where you expect to stay. c.) Write the name of the city where you expect to stay. If you are planning to travel around the U.S., write down the address of the place where you are planning to stay the longest. If you are an international student, write down the name of the School which you are going to attend, and its address.
9. Make a list of the countries that you visited prior to arriving to the U.S. If you are only coming from your home country or from where you live, write the name of this country in the first space.
10. Mark in the appropriate spaces if the purpose of this trip is business or personal. If the purpose of this trip is tourism (pleasure) mark the space corresponding to personal. If you are an international student, mark the space corresponding to personal.
11. Mark yes, if you are bringing fruits, plants, meat, food, soil, birds, snails, other live animals, farm products, or you have been in a ranch or farm outside the U.S. before arriving to the U.S.
12. Mark yes, if you are bringing more than \$10,000, in the sum of effective money, checks, stocks or



bonds, or any other type of monetary instruments; if you are bringing the foreign equivalent for that amount of money or the combination of the two.

13. Mark in this space if you are bringing commercial merchandise with you. Commercial merchandise, is that merchandise that you are bringing for the purpose of trade. This merchandise could have been bought in the U.S, or any foreign country.

14. If you are a U.S. Resident; write the total value of all the goods, including commercial merchandise, and articles that you bought in a duty free shop, and that you acquired abroad. Include the value of all articles purchased and even those articles received as a gift. Write the description of every article, by their common name. Write down the price of the article, and finally write down the total value of the prices of each article, and put this total on the back of this form. If you don't have anything to declare write \$ -0- in the space to the right. If you are a visitor, you should write down the value of all the goods that you brought to this country intended for commercial use, or for gifts.

**Signature Instructions.**

After having read and understood the instructions, sign the form and write today's date, in the form (DD /MM /YY).

## **APPENDIX K**

### **Functional Specifications for the FTA**

The FTA project demonstrated the proof-of-concept of using a computer to present speech and text instructions to Non-English speaking users in a selected language. The proof-of-concept demonstration system was useful in determining the minimum acceptable level of system functionality. The following functional specifications address that minimum level of functionality.

#### **Hardware**

- IBM PC AT clone utilizing a 286 CPU operating at 8 MHz
- Hard drive with the capacity to accept multiple speech files
- Standard 16 color VGA card
- Black and White monitor
- Standard telephone handset with armored cable (without microphone)
- External functioning speech delivery capability
- In-line, selectable level speech amplifier
- User, telephone style keypad, input device

#### **Software**

- Primary software management shell capable of :
  - displaying and swapping high-quality pictures on a VGA screen,
  - changing the screen color palette,
  - interfacing with, and controlling external programs to:
    - produce sound,
    - animation, and
    - interact with and control the user input device (Keypad).

#### **Environmental Housing**

- An environmental housing for the FTA capable of providing:
  - security from pilferage and vandalism in a public access area,
  - access by the user to the:
    - keypad device for user input,
    - computer screen for visual information,
    - telephone handset for speech information.



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# ATTACHMENT 1

## Final Report



U.S. Customs Service  
Forms Translator Assistant

# OPERATORS MANUAL

PROOF-OF-CONCEPT  
DEMONSTRATION





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# U. S. Customs Service

## OPERATOR'S MANUAL

# FORMS TRANSLATOR ASSISTANT

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# FORMS TRANSLATOR ASSISTANT

## OPERATOR'S MANUAL

### Hardware Requirements for the Forms Translator Assistant (FTA)

- IBM™ compatible, PC with DOS 3.3 or higher
- COVOX™ Speech Thing
- Hard disk with 3 MB of free space
- High-density 3.5" disk drive

### Installing the FTA

(NOTE: These directions assume your High-density 3.5" disk drive is your A: drive)

1. At the DOS prompt (C:\ ) type:  
**md\fta** ↵ ( ↵ = Enter key)
2. Place FTA Demo Disk #1 into the A: drive
3. Type:  
**copy a:\*. \* \fta** ↵
4. When the DOS prompt returns, remove Disk #1
5. Repeat steps 2 through 4 for Disks #2 and #3

### Running the FTA Demonstration

1. At the DOS prompt (C:\ ) type:  
**cd\fta** ↵
2. The DOS prompt will change to **C:\fta**. Then type:  
**fta** ↵

The FTA program will start. The FTA program is designed to continuously cycle through the interface instructions, in each language, until interrupted with a command for information. This FTA Demonstration is only available in Spanish.

### Interface Instructions

- You may use the keyboard number keys, or
- You may use the numeric keypad (**with Num Lock ON !**) for input.
- You may also use the Space Bar as the \* key to return to the previous screen.
- Press **Q** to quit the Demo program.

**English Instructions for completing the CF6059B used in the FTA**

**GENERAL INSTRUCTIONS**

- Read and listen carefully to the given instructions. Press the numbered bottom, next to the question, given on screen.

1. Write your last name or family name.
2. Write your first name.
3. Write the initial of your middle name. If you don't have a middle name, write the initials NMI in the given space.
4. Write your date of birth, in the form (DD /MM /YY).
5. Write the name of the vessel, or airline and include the flight number after it. You will be able to find this information in your plane ticket.
6. Write the number of family members that are traveling with you. Do not include yourself. The family members that you have to include, are those who are under your responsibility (wife, children, the elderly, etc...). If another adult in your family is traveling with you, this person will have to fill out a form, individually.
7. a.) Write the Country of Citizenship. b.) Country of Residence in the given space. These countries could be the same or different. You are considered to be a U.S. resident if you possess a Green Card (work permit).
8. a.) Write the address where you expect to stay, during your visit in the U.S. (This can be a house, a hotel, apartment, etc...). b.) Write the name of the city where you expect to stay. c.) Write the initials of the state where you expect to stay. If you are planning to travel around the U.S., write down the address of the place where are planning to stay the longest. If you are an international student, write down the name of the school which you are going to attend, and its address.
9. Make a list of the countries that you visited prior to arriving to the U.S. If you are only coming from your home country or from the country where you live, write the name of this country in the first space.
10. Mark in the given spaces if the purpose of this trip is business or personal. You should mark the box personal if the purpose of this trip is tourism (pleasure) or if you are an international student.
11. Mark yes, if you are bringing fruits, plants, meat, food, soil, birds, snails, other live animals, farm products, or you have been on a ranch or farm outside the U.S. before arriving in the U.S.



12. Mark yes, if you are bringing more than \$10,000, in the sum of currency, checks, stocks or bonds, or any other type of monetary instruments; if you are bringing the foreign equivalent for that amount of money or the combination of the two.

13. Mark in this space if you are bringing commercial merchandise with you. Commercial merchandise, is that merchandise that you are bringing for the purpose of trade. This merchandise could have been bought in the U.S, or any foreign country.

14. If you are a U.S Resident; write the total value of all the goods, including commercial merchandise, and articles that you bought in a duty free shop, and that you acquired abroad. Include the value of all articles purchased and even those articles received as a gift. Write the description of every article, by their common name. Write down the price of the article, and finally write down the total value of the prices of each article, and put this total on the back of this form. If you don't have anything to declare write \$ -0- in the space to the right. If you are a visitor, you should write down the value of all the goods that you brought to this country intended for commercial use, or for gifts.

**Signature Instructions.**

After reading, and understanding the instructions to fill out this form, sign the form in the given space and date it, in the form (DD /MM /YY ).

## Spanish instructions for completing the CF6059B used in the ETA

### **INSTRUCCIONES GENERALES**

-Lea y escuche atentamente las instrucciones. Oprima el botón enumerado al lado de la pregunta, que se encuentra en la pantalla.

1. Escriba su apellido paterno, o el apellido de su familia.
2. Escriba su primer nombre.
3. Escriba la inicial de su segundo nombre. Si usted no tiene segundo nombre, escriba las iniciales NMI en el espacio dado.
4. Escriba en este espacio, su fecha de nacimiento en la forma (DD /MM /AA), (Día/ Mes/ Año).
5. Escriba el nombre de la línea aérea, o barco con el que usted está viajando, y seguidamente escriba el número de su vuelo. Esta información la puede encontrar en su boleto o pasaje aéreo.
6. Escriba el número de familiares que viajan con usted. No se incluya ud. en este número. Los familiares que debe incluir son las personas que están a su cargo (Esposa, niños, sobrinos menores de edad, ancianos). Si otra persona adulta, de su misma familia viaja con usted, (Cuñada/o, o un hermano adulto, quien es responsable de sí mismo) esa persona tiene que llenar un formulario individualmente.
7. a.) Escriba en este espacio, el país de dónde usted tiene ciudadanía. b.) Escriba en este espacio el país de donde usted tiene residencia. Estos dos países pueden ser distintos o iguales. Usted es considerado un residente de los Estados Unidos, si usted tiene un permiso para trabajar en este país (green card).
8. a.) Escriba aquí la dirección dónde usted piensa permanecer durante su estadía en este país (Puede ser un hotel o casa de familia). b.) Escriba la ciudad dónde usted piensa permanecer. c) Escriba las iniciales del estado dónde piensa permanecer. Si usted piensa viajar dentro de los Estados Unidos, escriba la última dirección donde usted se quedará. Si usted es un estudiante internacional, escriba en este espacio la Universidad o Colegio que usted atenderá y su dirección.
9. Escriba una lista de los países que usted visitó antes de llegar a los Estados Unidos. Si usted solo viene de su país natal o de dónde usted vive, escriba el nombre de este país en el primer espacio.
10. Marque en el espacio apropiado si el propósito de su viaje es de negocios o personal. Si el propósito de su viaje es turismo, marque el espacio correspondiente a personal. Si usted es un estudiante internacional, marque el espacio correspondiente a personal.
11. Marque SI, si usted trae frutas frescas, plantas naturales, semillas, pájaros, carne o cualquier animal vivo; o ha estado en una granja o finca poco tiempo antes de entrar a este país.



12. Marque SI, si usted trae más de \$10,000 en la suma de dinero en efectivo, cheques, bonos, giros bancarios, o acciones, en cualquier combinación de estos o cualquier otro tipo de instrumento monetario; o si trae el equivalente en dólares de su moneda nacional.

13. Marque en este espacio si trae mercancía consigo mismo. Se considera como mercancía cualquier producto que usted traiga a este país con el propósito de usarlo para el comercio. Esta mercadería puede haber sido comprada en los Estados Unidos, o en el extranjero.

14. Si usted es un residente de los Estados Unidos; escriba el valor total de todos los artículos que usted trae, incluyendo mercadería que usted obtuvo en las tiendas libre de impuestos (Duty free), o que la haya adquirido en el extranjero. Incluya el valor de todos los artículos adquiridos, incluyendo aquellos recibidos como regalos. La descripción de los precios de cada artículo, escribala en el reverso de éste formulario. Escriba el valor total de tales artículos en el espacio dado. Si no tiene nada que declarar escriba \$ -0- en el espacio a la derecha. Si usted es un visitante, escriba el valor total de los artículos que trae a este país, cuyo propósito es para el comercio, o todos aquellos artículos que usted piensa dejar en este país como regalo a un pariente o amigo.

#### **Instrucciones para la firma**

Después de haber leído y entendido las instrucciones, firme el formulario y escriba la fecha del día de hoy en la forma (DD /MM /AA).

**English translation of Spanish instructions for completing the CF6059B used in the ETA**

**GENERAL INSTRUCTIONS**

- Read and listen carefully to the instructions. Press the button beside each question to receive oral and written instructions.

1. Write your father's last name, or the last name of your family.
2. Write your first name.
3. Write the initial of your second name. If you don't have a second name, write the initials NMI in the given space.
4. Write in this space your date of birth, in the form (DD /MM /YY) (Day/ Month/ Year).
5. Write the name of the airline, or the boat (vessel) in which you are traveling, include the flight number after it. This information can be found on your ticket.
6. Write the number of family members that are traveling with you. Do not include yourself in this number. The family members that you have to include, are those persons of whom you are in charge (wife, children, the elderly, etc...). If another adult person, of your same family is traveling with you, this person will have to fill out a form, individually.
- 7 a.) Write the Country of Citizenship. b.) Write the Country of Residence in the given space. These countries could be the same or different. You are considered to be a U.S. resident if you are allowed to work in this country (green card).
- 8 a.) Write the address where you expect to stay, during your visit in the U.S. (This can be a house, a hotel, apartment, etc...). b.) Write the initials of the state where you expect to stay. c.) Write the name of the city where you expect to stay. If you are planning to travel around the U.S., write down the address of the place where you are planning to stay the longest. If you are an international student, write down the name of the School which you are going to attend, and its address.
9. Make a list of the countries that you visited prior to arriving to the U.S. If you are only coming from your home country or from where you live, write the name of this country in the first space.
10. Mark in the appropriate spaces if the purpose of this trip is business or personal. If the purpose of this trip is tourism (pleasure) mark the space corresponding to personal. If you are an international student, mark the space corresponding to personal.
11. Mark yes, if you are bringing fruits, plants, meat, food, soil, birds, snails, other live animals, farm products, or you have been in a ranch or farm outside the U.S. before arriving to the U.S.
12. Mark yes, if you are bringing more than \$10,000, in the sum of effective money, checks, stocks or bonds, or any other type of monetary instruments; if you are bringing the foreign equivalent for that amount of money or the combination of the two.



13. Mark in this space if you are bringing commercial merchandise with you. Commercial merchandise, is that merchandise that you are bringing for the purpose of trade. This merchandise could have been bought in the U.S, or any foreign country.

14. If you are a U.S. Resident; write the total value of all the goods, including commercial merchandise, and articles that you bought in a duty free shop, and that you acquired abroad. Include the value of all articles purchased and even those articles received as a gift. Write the description of every article, by their common name. Write down the price of the article, and finally write down the total value of the prices of each article, and put this total on the back of this form. If you don't have anything to declare write \$ -0- in the space to the right. If you are a visitor, you should write down the value of all the goods that you brought to this country intended for commercial use, or for gifts.

**Signature Instructions.**

After having read and understood the instructions, sign the form and write today's date, in the form (DD /MM /YY).

# Forms Translator Assistant

1	Español
2	English
3	Português
4	Deutsch
5	Français
6	Italiano



Developed under the direction of  
Darr Mullally  
at the  
Institute for Simulation and Training  
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Figure 1. Opening Screen of the Forms Translator Assistant

## ¿Necesita ayuda llenar las formas de Declaración de Aduanas?

- Levante la bocina telefónica.
- Presione el botón **1** que aparece en la pantalla.

Instrucciones audio-visuales  
le serán proporcionadas  
para brindarle asistencia  
en su lenguaje.

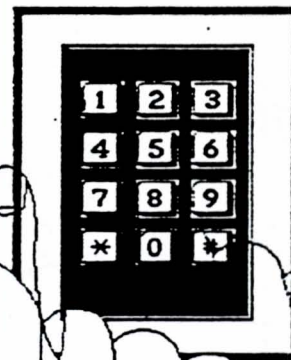


Figure 2. Animated Instruction Screen in Spanish. (Button No.1.)



APHS/FWS USE ONLY   DEPARTAMENTO DEL TESORO SERVICIO DE ADUANAS DE LOS ESTADOS UNIDOS <b>DECLARACION DE ADUANAS</b> 19 CFR 122.27, 148.12, 148.118, 148.111	<b>BIENVENIDO A LOS ESTADOS UNIDOS</b>  FORM APPROVED OMB No. 1510-0041	
Todo viajero o jefe de familia que llega a los Estados Unidos debe facilitar la información siguiente (basta con una declaración por familia)		
1	1. Apellido	3
2	2. Primer nombre	4
	3. Inicial del segundo nombre	4
5	4. Fecha de nacimiento	6
5	5. Aerolínea/No. de vuelo, o nombre del barco	6
7	6. No. de familiares que viajan con Ud.	
7	7. (a.) País de ciudadanía	
	7. (b.) País de residencia	
8	8. (a) Dirección en EE. UU. (No. de calle/hotel)	
9	8. (b) Dirección en EE. UU. (Ciudad)	
	8. (c) Dirección en EE. UU. (Estado)	
9. Países visitados en este viaje, antes de llegar a los EE. UU.		

Figure 3. Upper Half (Questions No. 1. - 8.) of CF6059B (Prototype) (Spanish)

 DEPARTAMENTO DEL TESORO SERVICIO DE ADUANAS DE LOS ESTADOS UNIDOS <b>DECLARACION DE ADUANAS</b> 19 CFR 122.27, 148.12, 148.118, 148.111	<b>BIENVENIDO A LOS ESTADOS UNIDOS</b>  FORM APPROVED OMB No. 1510-0041	
Todo viajero o jefe de familia que llega a los Estados Unidos debe facilitar la información siguiente (basta con una declaración por familia)		
1. Escriba su apellido paterno, o el apellido de su familia.		
10. El propósito de mi viaje es o era: A. Trabajo ( ) B. Negocios ( ) C. Personal ( )		
11. Traigo (traeré) frutas, plantas, carnes, alimentos, flora, caracoles, u otros animales vivos, productos agrícolas, o he (traeré) estado en una finca o granja fuera de los EE. UU. SI ( ) NO ( )		

Figure 4. Instructions for Question No. 1.



Información siguiente (basta con una declaración por familia)

1. Apellido

2. Primer nombre

3. Inicial del segundo nombre

4. Fecha de nacimiento

5. Aeronave, No. de vuelo, o nombre del barco

6. No. de familiares que viajan con Ud.

7. (a) País de ciudadanía

7. (b) País de residencia

8. (a) Dirección en EE. UU.

8. (b) Dirección en EE. UU.

9. Países visitados en EE. UU.

10. El propósito de su viaje es:

(Marque uno o ambos espacios, si es aplicable) Negocios ☐ Personal ☐

11. Traigo (traeré) frutas, plantas, carnes, alimentos, tierra, caracoles, u otros animales vivos, productos agrícolas, o he (hechos) estado en una finca o granja fuera de los EE. UU. SI ☐ NO ☐

12. Traigo (traeré) más de US\$ 10,000.00 en efectivo o en instrumentos monetarios, o su equivalente en moneda extranjera. SI ☐ NO ☐

13. Traigo (traeré) mercancía comercial de EE. UU.

2. Escriba su primer nombre.

Figure 5. Instructions for Question No. 2.

Información siguiente (basta con una declaración por familia)

1. Apellido

2. Primer nombre

3. Inicial del segundo nombre

4. Fecha de nacimiento

5. Aeronave, No. de vuelo, o nombre del barco

6. No. de familiares que viajan con Ud.

7. (a) País de ciudadanía

7. (b) País de residencia

8. (a) Dirección en EE. UU.

8. (b) Dirección en EE. UU.

9. Países visitados en EE. UU.

10. El propósito de su viaje es:

(Marque uno o ambos espacios, si es aplicable) Negocios ☐ Personal ☐

11. Traigo (traeré) frutas, plantas, carnes, alimentos, tierra, caracoles, u otros animales vivos, productos agrícolas, o he (hechos) estado en una finca o granja fuera de los EE. UU. SI ☐ NO ☐

12. Traigo (traeré) más de US\$ 10,000.00 en efectivo o en instrumentos monetarios, o su equivalente en moneda extranjera. SI ☐ NO ☐

13. Traigo (traeré) mercancía comercial de EE. UU.

3. Escriba la inicial de su segundo nombre. Si usted no tiene segundo nombre, escriba las iniciales NMI en el espacio dado.

Figure 6. Instructions for Question No. 3.



Información siguiente (basta con una declaración por familia)

1. Apellido			
2. Primer nombre	3. Inicial del segundo nombre	4. Fecha de nacimiento (día mes año)	
5. Aerolínea/ No. de vuelo, o nombre del barco		6. No. de familiares que viajan con Ud.	
7. (a) País de ciudadanía	7. (b) País de residencia		
8. (a) Dirección en EE. U.	<b>4. Escriba en este espacio, su fecha de nacimiento en la forma (DD /MM /AA), (Día/ Mes/ Año).</b>		
8. (b) Dirección en EE. U.			
9. Países visitados en EE. U.			
10. El propósito de mi viaje (Marque uno o ambos espacios, si es aplicable) Negocios <input type="checkbox"/> Personal <input type="checkbox"/>			
11. Traigo (Traeré) frutas, plantas, carnes, alimentos, tierra, caracoles, u otros animales vivos, productos agrícolas, o herramientas) estado en una finca o granja fuera de los EE. UU. SI <input type="checkbox"/> NO <input type="checkbox"/>			
12. Traigo (Traeré) más de US\$ 10,000.00 en efectivo o en instrumentos monetarios, o su equivalente en moneda extranjera. SI <input type="checkbox"/> NO <input type="checkbox"/>			
13. Tengo (Tendré) mercancía sujeta al pago de impuestos.			

Figure 7. Instructions for Question No. 4.

2. Primer nombre	3. Inicial del segundo nombre	4. Fecha de nacimiento (día mes año)
5. Aerolínea/ No. de vuelo, o nombre del barco		6. No. de familiares que viajan con Ud.
7. (a) País de ciudadanía	7. (b) País de residencia	
8. (a) Dirección	<b>5. Escriba el nombre de la línea aérea, o barco con el que usted está viajando, y seguidamente escriba el número de su vuelo. Esta información la puede encontrar en su boleto o pasaje aéreo.</b>	
8. (b) Dirección		
9. Países visitados en EE. U.		
10. El propósito de mi viaje (Marque uno o ambos espacios, si es aplicable) Negocios <input type="checkbox"/> Personal <input type="checkbox"/>		
11. Traigo (Traeré) frutas, plantas, carnes, alimentos, tierra, caracoles, u otros animales vivos, productos agrícolas, o herramientas) estado en una finca o granja fuera de los EE. UU. SI <input type="checkbox"/> NO <input type="checkbox"/>		
12. Traigo (Traeré) más de US\$ 10,000.00 en efectivo o en instrumentos monetarios, o su equivalente en moneda extranjera. SI <input type="checkbox"/> NO <input type="checkbox"/>		
13. Tengo (Tendré) mercancía sujeta al pago de impuestos.		
14. El valor total de los artículos que he traído.		

Figure 8. Instructions for Question No. 5.



7. Primer nombre		3. Inicial del segundo nombre		4. Fecha de nacimiento	
5. Aerolínea, No. de vuelo, o nombre del barco				6. No. de familiares que viajan con Ud.	
7. (a.) País de ciudadanía			7. (b.) País de residencia		
8. (a.) Dirección en EE. UU. (No. de calle, hotel)				Estado)	
8. (b.) Dirección					
9. Países visitados					
10. El propósito de su viaje (marque uno)				Personal <input type="checkbox"/>	
11. Trabajo (trabajo, negocio, o estudio en EE. UU.)				Profesional <input type="checkbox"/>	
12. Trabajo efectivo o equivalente en EE. UU.				NO <input type="checkbox"/>	
13. Trabajo (trabajo, negocio, o estudio en EE. UU.)				NO <input type="checkbox"/>	
14. El valor total de los artículos que ha traído consigo				Dólares de EE. UU.	

6. Escriba el número de familiares que viajan con usted. No se incluya ud. en este número. Los familiares que debe incluir son las personas que están a su cargo (Esposa, niños, sobrinos menores de edad, ancianos). Si otra persona adulta, de su misma familia viaja con usted, (Cuñada/o, o un hermano adulto, quien es responsable de sí mismo) esa persona tiene que llenar un formulario individualmente.

Figure 9. Instructions for Question No. 6.

5. Aerolínea, No. de vuelo, o nombre del barco		6. No. de familiares que viajan con Ud.	
7. (a.) País de ciudadanía		7. (b.) País de residencia	
8. (a.) Dirección en EE. UU. (No. de calle, hotel)			
8. (b.) Dirección			
9. Países visitados			
10. El propósito de su viaje (marque uno)			
11. Trabajo (trabajo, negocio, o estudio en EE. UU.)			
12. Trabajo efectivo o equivalente en EE. UU.			
13. Trabajo (trabajo, negocio, o estudio en EE. UU.)			
14. El valor total de los artículos que ha traído consigo			

7. a) Escriba en este espacio, el país de dónde usted tiene ciudadanía. b) Escriba en este espacio el país de donde usted tiene residencia. Estos dos países pueden ser distintos o iguales. Usted es considerado un residente de los Estados Unidos, si usted tiene un permiso para trabajar en este país (green card).

Figure 10. Instructions for Question No. 7.a. and 7.b.



7. (a.) País de ciudadanía		7. (b.) País de residencia	
8. (a) Dirección en EE. UU. (No. de calle/hotel)			
8. (b) Dirección en EE. UU. (Ciudad)		8. (c) Dirección en EE. UU. (Estado)	
9. Países visitados en este viaje, antes de llegar a los EE. UU.			
<p>10. El propósito de mi viaje es o era: (Marque uno o ambos espacios, si es aplicable)</p> <p>11. Traigo (Traemos) frutas, plantas, carnes, alimentos, tierra, caracoles, u otros animales vivos, productos agrícolas, o he (hemos) estado en una finca o granja fuera de los EE. UU.:</p> <p>12. Traigo (Traemos) más de US \$10,000.00 en efectivo o en instrumentos monetarios, o su equivalente en moneda extranjera:</p> <p>13. Tengo (Tenemos) mercancía comercial de los EE. UU. o extranjera: (Marque sólo un espacio)</p> <p>14. El valor total de los artículos que he (hemos) comprado o adquirido, y que traigo (traemos) a los EE. UU., asciende a:</p>			
FIRMA		PERSONAL	
ADVERTENCIA AL DORSO DE ESTA DECLARACIÓN		DE EE. UU.	

8. a) Escriba aquí la dirección donde usted piensa permanecer durante su estadía en este país (Puede ser un hotel o casa de familia). b) Escriba la ciudad donde usted piensa permanecer. c) Escriba las iniciales del estado donde piensa permanecer. Si usted piensa viajar dentro de los Estados Unidos, escriba la última dirección donde usted se quedará. Si usted es un estudiante internacional, escriba en este espacio la Universidad o Colegio que usted atenderá y su dirección.

Figure 11. Instructions for Question No. 8.a., 8.b., and 8.c.

8. (b) Dirección en EE. UU. (Ciudad)		8. (c) Dirección en EE. UU. (Estado)	
9. Países visitados en este viaje, antes de llegar a los EE. UU.			
a.		b.	
c.		d.	
10. El propósito de mi viaje es o era: (Marque uno o ambos espacios, si es aplicable) Negocios <input type="checkbox"/> Personal <input type="checkbox"/>			
11. Traigo (Traemos) frutas, plantas, carnes, alimentos, tierra, caracoles, u otros animales vivos, productos agrícolas, o he (hemos) estado en una finca o granja fuera de los EE. UU.:			
12. Traigo (Traemos) más de US \$10,000.00 en efectivo o en instrumentos monetarios, o su equivalente en moneda extranjera:			
13. Tengo (Tenemos) mercancía comercial de los EE. UU. o extranjera: (Marque sólo un espacio)			
14. El valor total de los artículos que he (hemos) comprado o adquirido, y que traigo (traemos) a los EE. UU., asciende a:			
		\$ Dólares de EE. UU.	
(Si no tiene nada que declarar, escriba \$-0- en el espacio dado) (Véase instrucciones al dorso de esta declaración, bajo MERCANCÍA)			
FIRMA ABAJO, DESPUES DE HABER LEIDO LA ADVERTENCIA AL DORSO DE ESTA DECLARACIÓN			
He leído la advertencia al dorso de esta declaración, y he declarado la			
U. S. Customs use only - No escriba debajo de esta línea - U. S. Customs use only			

Figure 12. Lower Half (Questions No. 9. - 15.) of CF6059B (Prototype) (Spanish)



B (b): Dirección en EE. UU. (Ciudad)		B (c): Dirección en EE. UU. (Estado)	
9. Países visitados en este viaje, antes de llegar a los EE. UU.			
a.	b.		
c.	d.		
10. El propósito de mi viaje es o era:			
11. Traigo (traeré) frutas, plantas, carnes, alimentos, tierra, caracoles, u otros animales vivos, productos agrícolas, o heatheros: <input type="checkbox"/> estado en un <input type="checkbox"/> 12. Traigo efectivo o equivalente en <input type="checkbox"/> 13. Tengo (tengo) EE. UU. o <input type="checkbox"/> 14. El valor comprado o a EE. UU., asc <input type="checkbox"/> (Si no tiene na instrucciones al		Personal <input type="checkbox"/> raciles, u <input type="checkbox"/> NO <input type="checkbox"/> NO <input type="checkbox"/> NO <input type="checkbox"/> de EE. UU. <input type="checkbox"/> Véase las <input type="checkbox"/> LA <input type="checkbox"/> ACION <input type="checkbox"/> de la verdad <input type="checkbox"/> VAL <input type="checkbox"/> Forms use only <input type="checkbox"/>	
FIRMA <input type="checkbox"/> ADVERT <input type="checkbox"/> He leído la <input type="checkbox"/> U.S. Customs <input type="checkbox"/> INSPECTOR <input type="checkbox"/>			

9. Escriba una lista de los países que usted visitó antes de llegar a los Estados Unidos. Si usted solo viene de su país natal o de dónde usted vive, escriba el nombre de este país en el primer espacio.

Figure 13. Instructions for Question No. 9.

a.	b.		
c.	d.		
10. El propósito de mi viaje es o era:			
(Marque uno o ambos espacios, si es aplicable) Negocios <input type="checkbox"/> Personal <input type="checkbox"/>			
11. Traigo (traeré) frutas, plantas, carnes, alimentos, tierra, caracoles, u otros animales vivos, productos agrícolas, o heatheros: <input type="checkbox"/> estado en un <input type="checkbox"/> 12. Traigo efectivo o equivalente en <input type="checkbox"/> 13. Tengo (tengo) EE. UU. o <input type="checkbox"/> 14. El valor comprado o a EE. UU., asc <input type="checkbox"/> (Si no tiene na instrucciones al		Personal <input type="checkbox"/> raciles, u <input type="checkbox"/> NO <input type="checkbox"/> NO <input type="checkbox"/> NO <input type="checkbox"/> de EE. UU. <input type="checkbox"/> Véase las <input type="checkbox"/> LA <input type="checkbox"/> ACION <input type="checkbox"/> de la verdad <input type="checkbox"/> VAL <input type="checkbox"/> Forms use only <input type="checkbox"/>	
FIRMA <input type="checkbox"/> ADVERT <input type="checkbox"/> He leído la <input type="checkbox"/> U.S. Customs <input type="checkbox"/> INSPECTOR <input type="checkbox"/>			

10. Marque en el espacio apropiado si el propósito de su viaje es de negocios o personal. Si el propósito de su viaje es turismo, marque el espacio correspondiente a personal. Si usted es un estudiante internacional, marque el espacio correspondiente a personal.

Figure 14. Instructions for Question No. 10.



10. El propósito de mi viaje es o era: (Marque uno o ambos espacios, si es aplicable) Negocios <input type="checkbox"/> Personal <input type="checkbox"/>	
11. Traigo (Traemos) frutas, plantas, carnes, alimentos, tierra, caracoles, u otros animales vivos, productos agrícolas, o he (hemos) estado en una finca o granja fuera de los EE. UU.: SI <input type="checkbox"/> NO <input type="checkbox"/>	
12. Traigo (Traemos) más de US \$10,000.00 en efectivo o equivalente en instrumentos monetarios, o su equivalente en moneda extranjera: SI <input type="checkbox"/> NO <input type="checkbox"/>	
13. Tengo (Tenemos) mercancía comercial de los EE. UU. o de otro país: SI <input type="checkbox"/> NO <input type="checkbox"/>	
14. El valor de la mercancía comprada o vendida en los EE. UU. es de \$100.00 o más: SI <input type="checkbox"/> NO <input type="checkbox"/>	
<div style="border: 1px solid black; padding: 10px; width: fit-content; margin: auto;"> <p>11. Marque SI, si usted trae frutas frescas, plantas naturales, semillas, pájaros, carne o cualquier animal vivo; o ha estado en una granja o finca poco tiempo antes de entrar a este país.</p> </div>	
FIRMA _____ ADVERTENCIA: He declarado la verdad. U.S. Customs and Border Protection INSPECTION	

Figure 15. Instructions for Question No. 11.

10. El propósito de mi viaje es o era: (Marque uno o ambos espacios, si es aplicable) Negocios <input type="checkbox"/> Personal <input type="checkbox"/>	
11. Traigo (Traemos) frutas, plantas, carnes, alimentos, tierra, caracoles, u otros animales vivos, productos agrícolas, o he (hemos) estado en una finca o granja fuera de los EE. UU.: SI <input type="checkbox"/> NO <input type="checkbox"/>	
12. Traigo (Traemos) más de US \$10,000.00 en efectivo o en instrumentos monetarios, o su equivalente en moneda extranjera: SI <input type="checkbox"/> NO <input type="checkbox"/>	
13. Tengo (Tenemos) mercancía comercial de los EE. UU. o de otro país: SI <input type="checkbox"/> NO <input type="checkbox"/>	
14. El valor de la mercancía comprada o vendida en los EE. UU. es de \$100.00 o más: SI <input type="checkbox"/> NO <input type="checkbox"/>	
<div style="border: 1px solid black; padding: 10px; width: fit-content; margin: auto;"> <p>12. Marque SI, si usted trae más de \$10,000 en la suma de dinero en efectivo, cheques, bonos, giros bancarios, o acciones, en cualquier combinación de estos o cualquier otro tipo de instrumento monetario; o si trae el equivalente en dólares de su moneda nacional.</p> </div>	
FIRMA _____ ADVERTENCIA: He declarado la verdad. U.S. Customs and Border Protection INSPECTION	

Figure 16. Instructions for Question No. 12.

estado en una finca o granja fuera de los EE. UU. :

12. Traigo (Traemos) más de US\$ 10,000.00 en efectivo o en instrumentos monetarios, o su equivalente en moneda extranjera. SI ☐ NO ☐

13. Tengo (Tenemos) mercancía comercial de los EE. UU. o extranjera. (Marque sólo un espacio) SI ☐ NO ☐

14. El valor total de los artículos que he (hemos) comprado o adquirido, y que traigo (traemos) a los EE. UU., asciende a: \$  (Si no tiene nada que declarar, escriba \$-0- en el espacio dado) (Véanse las instrucciones al dorso de esta declaración, bajo MERCANCIA)

FIRMA  
ADVERTENCIA

U.S. Customs  
INSPECTION

13. Marque en este espacio si trae mercancía consigo mismo. Se considera como mercancía cualquier producto que usted traiga a este país con el propósito de usarlo para el comercio. Esta mercadería puede haber sido comprada en los Estados Unidos, o en el extranjero.

Figure 17. Instructions for Question No. 13.

equivalente en moneda extranjera:

13. Tengo (Tenemos) mercancía comercial de los EE. UU. o extranjera. (Marque sólo un espacio): SI ☐ NO ☐

14. El valor total de los artículos que he (hemos) comprado o adquirido, y que traigo (traemos) a los EE. UU., asciende a: \$  (Si no tiene nada que declarar, escriba \$-0- en el espacio dado) (Véanse las instrucciones al dorso de esta declaración, bajo MERCANCIA)

FIRMA ABAJO DESPUÉS DE HABER LEÍDO LA

14. Si usted es un residente de los Estados Unidos; escriba el valor total de todos los artículos que usted trae, incluyendo mercadería que usted obtuvo en las tiendas libre de impuestos (Duty free), o que la haya adquirido en el extranjero. Incluya el valor de todos los artículos adquiridos, incluyendo aquellos recibidos como regalos. La descripción de los precios de cada artículo, escríbala en el reverso de éste formulario. Escriba el valor total de tales artículos en el espacio dado. Si no tiene nada que declarar escriba \$0 en el espacio a la derecha. Si usted es un visitante, escriba el valor total de los artículos que trae a este país, cuyo propósito es para el comercio, o todos aquellos artículos que usted piensa dejar en este país como regalo a un pariente o amigo.

Figure 18. Instructions for Question No. 14.



EE. UU. asciende a: _____	Dólares de EE. UU. _____
(Si no tiene nada que declarar, escriba X -ll- en el espacio dado; (Véanse las instrucciones al dorso de esta declaración bajo MERCANCIA)	
<b>FIRMA ABAJO, DESPUES DE HABER LEIDO LA ADVERTENCIA AL DORSO DE ESTA DECLARACION</b>	
He leído la advertencia al dorso de esta declaración, y he declarado la verdad.	
-----	
U. S. Customs use only - No escriba debajo de esta línea - U. S. Customs use only	-----
INSPECTOR'S BADGE NUMBER	STAMP AREA

Después de haber leído y entendido las instrucciones, firme el formulario y escriba la fecha del día de hoy en la forma (DD /MM /AA).

Figure 19. Instructions for Signature Block (Question No. 15.)

## Need help with Customs Declaration Forms?

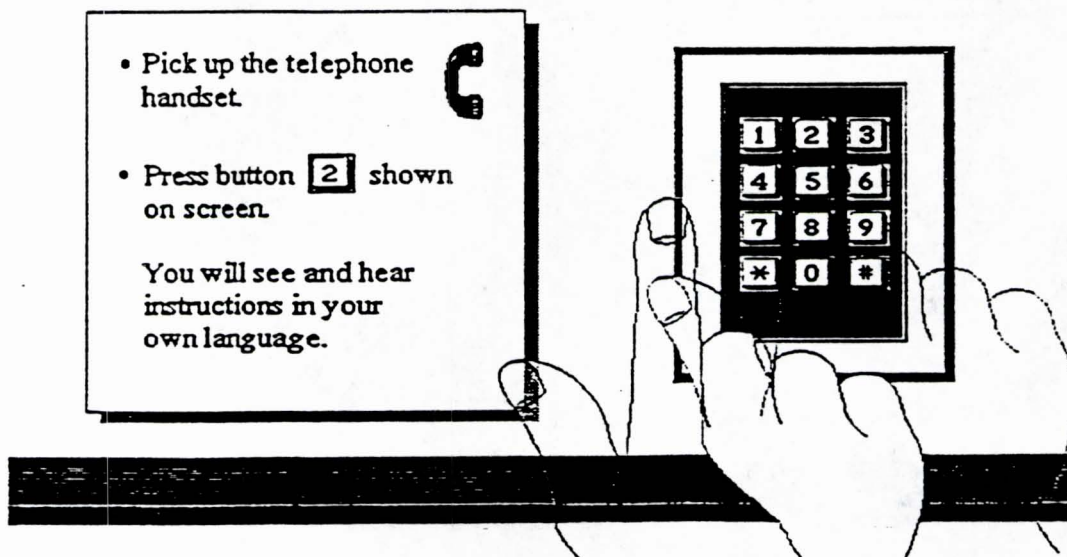


Figure 20. Animated Instruction Screen in English. (Button No. 2.)

This language is not available  
at this time.

---

Figure 21. English Screen - Not Available Message.

Necessita de ajuda com os  
Formulários de Alfândega?

---

• Pegue o telefone.



• Aperte o botão **3** que  
aparece na tela.

Você verá e escutará  
instruções no seu idioma.

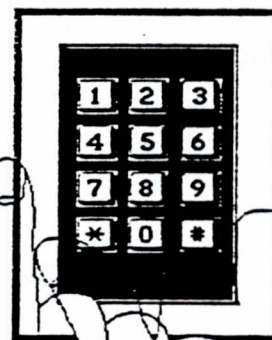


Figure 22. Animated Instruction Screen in Portuguese. (Button No. 3.)



Esse idioma não se encontra  
disponível no momento.

---

This language is not available  
at this time.

Figure 23. Portuguese Screen - Not Available Message.

Brauches Sie Hilfe mit dem Zollformular?

---

- Nehmen Sie dem Hörer ab.



- Drücken Sie dem Knopf **4** wie auf dem Bildschirm angezeigt.

Sie werden die Instruktionen  
in Ihrer Sprache hören und  
sehen.

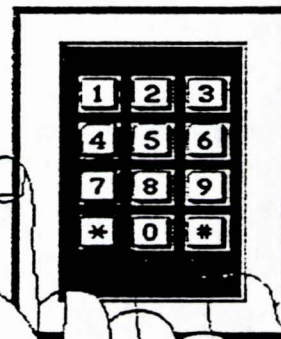


Figure 24. Animated Instruction Screen in German. (Button No. 4.)

Diese Sprache ist nicht verfügbar  
zu diesem Zeitpunkt.

---

This language is not available  
at this time.

Figure 25. German Screen - Not Available Message.

Vous avez besoin d'assistance pour remplir  
la Déclaration de Douane?

---

- décrochez le téléphone.



- Appuyez sur la touche **5** qui apparaît sur l'écran.

Vous allez recevoir  
des instructions audio-  
visuelles dans votre  
langue maternelle.

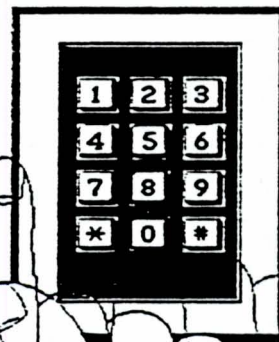


Figure 26. Animated Instruction Screen in French. (Button No. 5.)




Cette langue n'est pas disponible  
pour le moment.


---

This language is not available  
at this time.

Figure 27. French Screen - Not Available Message.

Serve aiuto a compilare i moduli di  
Dichiarazione di Dogana?

- Sollevare il ricevitore del telefono. 

- Premere il bottone   
come da figura sulla  
schermo.

Vedr  e sentir  istruzioni  
nella propria lingua.

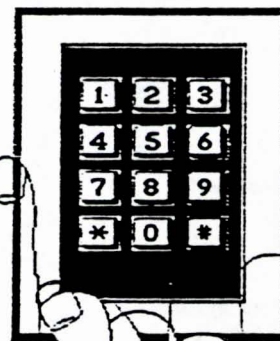


Figure 28. Animated Instruction Screen in Italian. (Button No. 6.)

Questa lingua non é ancora  
disponibile.

---

This language is not available  
at this time.

Figure 29. Italian Screen - Not Available Message.



# ATTACHMENT 2

## Final Report



U.S. Customs Service  
Forms Translator Assistant

## Source Code for the Forms Translator Assistant

PROOF-OF-CONCEPT  
DEMONSTRATION



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## ATTACHMENT 2

# FORMS TRANSLATOR ASSISTANT

## Proof-of-Concept Demonstration Source Code

The following source code is provided in accordance with the provisions of U.S. Customs Service, Department of the Treasury, Contract Number CS-1-91-32892-2/003. The "Forms Translator Assistant"

```
/** FTA autoexec script **/  
/** C. Gouge 17 Mar 92 **/  
go 1;  
/***** languages *****/  
var lang(5),  
    lang1(4), lang2(4), lang3(4),  
    lang4(4), lang5(4), lang6(4);  
set lang = "lang";  
set lang1 = "span";  
set lang2 = "engl";  
set lang3 = "port";  
set lang4 = "germ";  
set lang5 = "fren";  
set lang6 = "ital";  
  
var formOK(6), handOK(6);  
/** which langs have form **/  
set formOK = "1";  
/* which langs have titles */  
set handOK = "123456";  
/** sections -> questions **/  
var A1(2), A2(2), A3(2),  
    A4(2), A5(2), A6(2), A7(2),  
    A8(2), A9(2),  
    B8(2), B9(2), B0(2), B1(2),  
    B2(2), B3(2), B4(2), B5(2);  
set A1 = "01"; set B8 = "08";  
set A2 = "02"; set B9 = "09";  
set A3 = "03"; set B0 = "10";  
set A4 = "04"; set B1 = "11";  
set A5 = "05"; set B2 = "12";  
set A6 = "06"; set B3 = "13";  
set A7 = "07"; set B4 = "14";  
set A8 = "08"; set B5 = "15";  
set A9 = "09";
```

```

var sect(1),ques(2),said(7);
/* key (timeout for input) */
var key(20);
set key(20,1) = chr(0);

/***** hand *****/
load ready, "READY.PAL";
load press, "PRESS.PAL";
var i(1); set i = 0;
palette ready;
@moveHand
  object "screen";
  change "MAINLOGO";
  palette ready;
  set key = "60 ":chr(0):
  "Q":handOK:chr(0);
  extern "GETKEY", key;
  if key(1,1) $= "S" {
    set i = i + 1;
    if i>len(handOK) set i=1;
    set lang(5,1)=handOK(i,1);
    object "screen";
    change lang^:"HAND"
    set key = "20 ":chr(0):
    "Q":handOK:chr(0);
    extern "GETKEY", key;
    if key(1,1) $= "S" {
      palette press;
      set key = "25 ":chr(0):
      "Q":handOK:chr(0);
      extern "GETKEY", key;
      if key(1,1) $= "S" {
        palette ready;
        set key = "20 ":chr(0):
        "Q":handOK:chr(0);
        extern "GETKEY", key;
        if key(1,1) $= "S" {
          palette press;
          set key = "25 ":chr(0):
          "Q":handOK:chr(0);
          extern "GETKEY", key;
        } } } } /* <- ick
  */
  if key(1,1) $= "S"
    jump moveHand;
/***** which key *****/ if
key(1,1) $= "Q" quit;
match key(1,1), handOK;
if result = 0 jump moveHand;
set lang = "lang":key(1,1);
match key(1,1), formOK;
if result = 0 {
  object "screen";
  change lang^:"CANT";
  wait 2.5; jump moveHand;

```



```

}
/***** bring up form *****/
set sect = "A";
set said = "not yet";
@Section
  object "screen";
  change lang^:"SEC":sect;
  if said = "not yet"
    dos "s ":lang^:"SEC";
  set said = "already";
  @queskey
  set key ="4000":chr(0):
    "QS891234567":chr(0);
  if sect $="B"
    set key ="4000":chr(0):
      "QS891":chr(0);
  extern "GETKEY", key;
  if sect $="B" & key(1,1)=1 {
    set key = "300 ":chr(0):
      "QSP0123456789":chr(0);
    extern "GETKEY", key;
    if key(1,1) $= "Q" quit;
    match key(1,1),"012345";
    if result = 0 jump queskey;
  }
  if key(1,1) $= "Q" quit;
  if key(1,1) $= "S"
    jump movehand;
  set ques = sect:key(1,1);
  object "screen";
  change lang^:"QU":ques^;
  dos "s ":lang^:"QU":ques^;
  wait 1;
  if sect $="A" & key(1,1)=9
    set sect = "B";
  if sect $="B" & key(1,1)=8
    set sect = "A";
jump Section;
/***** end of script *****/

```

```

// GETKEY.C
// 20 Mar 92
// by Marina Tanco and Christopher Gouge

// This program is called by the LinkWay autoexec script of the FTA
// folder.
// It reads a keypress, from the phone keypad or regular PC keyboard,
// and
// returns the value of the keypress in a script variable.
// (written in C, compiled in Turbo C++)

#include <bios.h>
#include <stdlib.h>
#include <dos.h>

/* The following are key codes for the phone keypad. */
/* The standard keyboard equivalents are also noted. */
#define BUTTON_0      0x0b30      /* KEYBOARD_0      */
#define BUTTON_1      0x0231      /* KEYBOARD_1      */
#define BUTTON_2      0x0332      /* KEYBOARD_2      */
#define BUTTON_3      0x0433      /* KEYBOARD_3      */
#define BUTTON_4      0x0534      /* KEYBOARD_4      */
#define BUTTON_5      0x0635      /* KEYBOARD_5      */
#define BUTTON_6      0x0736      /* KEYBOARD_6      */
#define BUTTON_7      0x0837      /* KEYBOARD_7      */
#define BUTTON_8      0x0938      /* KEYBOARD_8      */
#define BUTTON_9      0x0a39      /* KEYBOARD_9      */
#define BUTTON_STAR    0x3920      /* KEYBOARD_SPACE */
#define BUTTON_POUND   0x1c0d      /* KEYBOARD_ENTER */

/* The following allow use of the numeric */
/* keypad on a standard keyboard.          */
/* Keys 0..9 require Num Lock to be on.    */
#define KEYPAD_0      0x5230
#define KEYPAD_1      0x4f31
#define KEYPAD_2      0x5032
#define KEYPAD_3      0x5133
#define KEYPAD_4      0x4b34
#define KEYPAD_5      0x4c35
#define KEYPAD_6      0x4d36
#define KEYPAD_7      0x4737
#define KEYPAD_8      0x4838
#define KEYPAD_9      0x4939
#define KEYPAD_STAR    0x372a
/* KEYPAD_POUND is the keypad "enter" key */

```



```

#define KEYBOARD_STAR    0x092a
#define KEYBOARD_POUND   0x0423

/* Quit options are available for standard keyboard only. */
#define KEYBOARD_Q        0x1051
#define KEYBOARD_q        0x1071
#define KEYBOARD_ESC      0x011b

/* Total number of keys being used */
#define MAX_KEYS          28

static int ScanCodes[ MAX_KEYS ] = {
    BUTTON_0,
    BUTTON_1,
    BUTTON_2,
    BUTTON_3,
    BUTTON_4,
    BUTTON_5,
    BUTTON_6,
    BUTTON_7,
    BUTTON_8,
    BUTTON_9,
    BUTTON_STAR,
    BUTTON_POUND,
    KEYPAD_0,
    KEYPAD_1,
    KEYPAD_2,
    KEYPAD_3,
    KEYPAD_4,
    KEYPAD_5,
    KEYPAD_6,
    KEYPAD_7,
    KEYPAD_8,
    KEYPAD_9,
    KEYPAD_STAR,
    KEYBOARD_STAR,
    KEYBOARD_POUND,
    KEYBOARD_Q,
    KEYBOARD_q,
    KEYBOARD_ESC,
};

```

```

/* Return values for respective keypresses */
/* Note 'S' == Star (*), 'P' == Pound (#) */
/* and, for keyboard only, 'Q' == Quit key */

```

```

static char RetCodes[ MAX_KEYS ] = {

```

```

    '0',
    '1',
    '2',
    '3',
    '4',
    '5',
    '6',
    '7',
    '8',
    '9',
    'S',
    'P',
    '0',
    '1',
    '2',
    '3',
    '4',
    '5',
    '6',
    '7',
    '8',
    '9',
    'S',
    'S',
    'P',
    'Q',
    'Q',
    'Q'

```

```

};

```

```

int main( int argc, char *argv[] )

```

```

{
    int key;
    register int i;
    int done = 0;

    char far *ret_val = MK_FP (atoi (argv [3]), 0);

    /* Which return values are OK? */
    char far *valid_ret = MK_FP (atoi (argv [3]), 5);

    /* Max time to wait for key in 10ths of sec */

```



```

int timeout = atoi (ret_val);

int time_up = 0;

struct time t1, t2;

int time_elapsed;

if (argc < 5) return -1;

gettime (&t1);

while ( !done && !time_up ) {
    gettime (&t2);

    time_elapsed = ((int) (t2.ti_hour - t1.ti_hour) * 36000) +
                    ((int) (t2.ti_min - t1.ti_min ) * 600) +
                    ((int) (t2.ti_sec - t1.ti_sec ) * 10) +
                    ((int) (t2.ti_hund - t1.ti_hund) / 10);

    if (time_elapsed >= timeout) {
        time_up = 1;
        *ret_val = 'S';
    }

    if ( bioskey( 1 ) ) {
        key = bioskey( 0 );

        for ( i = 0; i < MAX_KEYS; i++ ) {
            if ( ScanCodes [i] == key ) {
                *ret_val = RetCodes [i];
                if (strchr (valid_ret, *ret_val)) {
                    done = 1;
                }
            }
            else {
                *ret_val = 'S';
            }
        }
    }
}

return 0;
}

// End of GETKEY.C

```

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# ATTACHMENT 3

## Final Report



U.S. Customs Service  
Forms Translator Assistant

Video Tape  
Forms Translator Assistant  
Demonstration

PROOF-OF-CONCEPT  
DEMONSTRATION







**ATTACHMENT 3**

**Video Tape**

**FORMS TRANSLATOR ASSISTANT**

**PROOF-OF-CONCEPT  
DEMONSTRATION**

**IS  
INCLUDED  
IN THE  
ORIGINAL  
ONLY**

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# ATTACHMENT 4

## Final Report



U.S. Customs Service  
Forms Translator Assistant

## Enhanced FTA Project White Paper

PROOF-OF-CONCEPT  
DEMONSTRATION





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# U. S. CUSTOMS

## WHITE PAPER

**for the**

**Enhanced Forms Translator Assistant (EFTA)**

**2 March 1992**

**Institute for Simulation and Training  
University of Central Florida  
12424 Research Parkway  
Orlando, Florida 32826**

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**Institute for Simulation and Training  
University of Central Florida  
12424 Research Parkway  
Orlando, Florida 32826**

**U. S. Customs**

**WHITE PAPER  
for the  
Enhanced Forms Translator Assistant**

**OVERVIEW**

This paper discusses development of a proof-of-concept project designed to demonstrate the ability to utilize pen-based input technology to complete required U. S. Customs forms. This project would prototype a computer-based system which would provide a means to accept the handwritten input of responses to the questions on the U.S. Customs Declaration Form 6059B. The proposed prototype would be developed using the previously developed Forms Translator Assistant as the delivery platform and testbed. The prototype would be designed to allow the user to select a language, select a question, see and hear the directions on how to respond to the question and then allow handwritten input of his response via the pen-based input device. This project would be titled the Enhanced Forms Translator Assistant (EFTA).

This EFTA prototype would serve to demonstrate the input phase of the UCF proposed Automated Customs Clearing, Examination, and Prescreening of Travelers System (ACCEPT) System. Future research could lead to the development of a complete ACCEPT system to include the computer presentation, input, transmission and data integration into the U.S. Customs "Master Plan for Air Passenger Processing at U.S. Airports for the 1990s".

Outlined below are the Background, Introduction, Objectives, Technical Approach, and Deliverables for the EFTA prototype.

**BACKGROUND**

The Institute for Simulation and Training, University of Central Florida, under contract to the U.S. Customs Service, has developed a computer assisted Forms Translator Assistant (FTA). This Research and Development contract was the result of an unsolicited proposal to the U. S. Customs Service. The unsolicited proposal sought to demonstrate the potential use of the FTA as a means to allow foreign visitors, with low or nonexistent English reading skills, to complete the U.S. Customs declaration forms assisted by a low-cost computer presentation. This project is on time and has met the objectives of the FTA proposal.



Those objectives were to:

- Take advantage of recent advances in computer technology which support computer delivered speech and text;
- Design a functional Forms Translator Assistant in as short a time as possible; and,
- Produce and test this Forms Translator Assistant for proof-of-concept within six months (or sooner) after program start.

The demonstrated success of the Forms Translator Assistant was the first, and most critical, step, in the development of an **Automated Customs Clearing, Examination, and Pre-screening of Travelers (ACCEPT)** system. Without this feasibility demonstration, the decision to proceed with the development of a automated, computer-based system to pre-screen air travelers could not logically proceed to the next developmental step, a prototype testbed to demonstrate the **input phase** of the UCF proposed ACCEPT System.

## INTRODUCTION

This White Paper outlines a research and development project to determine the system requirements and develop a prototype testbed for an EFTA prototype. The basis of this White Paper is an ordered "Systems Approach" to analyze, design, develop, and evaluate the EFTA system.

In the analysis and development of the FTA, it became apparent that the development of an automated capability to complete the Customs declaration forms could be achieved if a number of critical issues could be resolved. These critical issues are:

- Can the instructions for completing the Customs declaration forms be presented to the user in both text and speech in a selected foreign language via a low-cost, computer based system?
- **Can the user complete the Customs declaration forms using a system which will accept hand written information?**
- **Can the system receive, store, and reproduce the signature of the user with a high degree of accuracy so that it can be introduced as evidence in a court of law if required?**
- **Can the system provide a means of printing a completed Customs form on demand at any time?**
- Can the system provide a portable electronic means to store a personal copy of the data which will accompany the passenger while in route?
- Can the system interface with other sources such as the Advanced Passenger Information System (APIS) and from airline ticketing systems?
- Can the system transmit the data collected in a timely fashion to the U.S. Customs Service Data Center in a format compatible with the Interagency Border Inspection System (IBIS) and the APIS.
- Can the system be made fully compatible with the existing computer based systems within the Air Passenger Processing Master Plan for the 1990's.

If the critical issues listed above can be addressed in a systematic research and development program then the goal of 100% automated pre-screening can be achieved by the U.S. Customs Service. We propose to develop a prototype to demonstrate that those critical issues listed above **in bold print** can be accomplished

The availability and cooperation of the Greater Orlando Aviation Authority has been sought and gained on a previously proposed project to research the FTA prototype development under a



Florida High Technology and Industry Council grant and under the U.S. Customs FTA contract. Conversations with several major airlines as well as the Immigration and Naturalization Service have indicated a strong interest in the outcome of a EFTA prototype demonstration. Liaison will continue to develop additional interested parties from within the airline industry, the Orlando International Airport or other governmental agencies capable of providing funding support to the proposed EFTA project.

## OBJECTIVES

The objectives of this project are to:

- Take advantage of recent advances in computer technology which support computer delivered speech and text, and pen-based systems;
- Analyze the requirements to develop a functional EFTA Prototype Testbed.
- Design and develop a functional EFTA Prototype Testbed having the ability to:
  - present oral and written instructions in a foreign language,
  - receive handwritten input to those instructions,
  - present the handwritten input on screen for review,
  - accept handwritten changes to the input,
  - convert the handwritten change input to printed text-on-screen,
  - accept handwritten changes to edit the printed text-on-screen,
  - present the re-edited final inputted text-on-screen for approval,
  - accept the approved input, and finally,
  - store the data in a structured file to allow retrieval on demand to either print to a blank form, display on screen as a completed form or transport the file data as required.
- Evaluate the developed EFTA Prototype Testbed.

This project is highly feasible because it builds on the existing programs currently under development at IST. This developmental project will capitalize on the success of several ongoing R&D projects at IST. These projects include technology developed and funded by the Department of Defense (DoD) and the Florida High Technology and Industry Council. Related current and planned R&D projects include a joint development with a large commercial textbook company to develop an elementary English as a Second Language (ESOL) project using related low-cost presentation technology.

## TECHNICAL APPROACH

The Systems Approach will be used in the phased development of the EFTA prototype. The ACCEPT System Prototype Testbed Development Program outlined above identifies several critical issues which must be successfully demonstrated for the total System to meet design goals. Phases have been established to allow critical design review and create system decision points. The critical issues have been listed as tasks in the Statement of Work section.

The FTA system will function as the initial component of the EFTA testbed. This will allow the initial FTA kiosk design to be used as a platform to mount a digitizing tablet directly below the FTA keypad and screen. This design will allow the user to view their digitizer pen input as it appears on the computer screen for correctness. Once the user is satisfied that the block capital



pen input shown on the screen is correct, they will tap the entry block on the digitizing pad. This will input the answer and automatically convert it to printed screen text which will appear in the appropriate space on the 6059B. The user will sequentially answer the questions found in the prototype 6059B developed for the FTA project. After all 14 questions on the the FTA Prototype 6059 are filled in, the user will be instructed to review the input for accuracy one final time, and then sign the completed form.

If any question is left unanswered the user will be re-prompted to complete that question. The user will be told that they must fill in the 6059B completely to be admitted into the U.S. Failure to fill in all of the questions prior to signing the form will call up a screen and voice message with instructions to seek further assistance from the EFTA System or from available airline or Customs personnel.

System development phases of the **ACCEPT** system are:

- Phase 1, the proof-of concept **input** phase, the completed 6059B form will be printed and an electronic data base will be created on the FTA host computer.
- Phase 2, the proof-of-concept **transmission** phase, an electronic transmission will be produced tied into a network, or transferred into a portable individual transmission means (Memory Card or Magnetic Boarding Card) or batch transmission (Floppy disk) means.
- Phase 3, the proof-of-concept **integration** phase, the **ACCEPT** system prototype testbed will be evaluated to determine if the system can automate the transmission of required data needed to create a paperless pre-screening system.

## **DELIVERABLES**

**Develop and demonstrate a handwriting input device for the proof-of concept demonstration testbed for the ACCEPT System.**

Development of the **EFTA** will be completed within a 6 month period. The developmental goal is to analyze, design, and develop a capability which will allow the handwritten input of information to complete the Customs Declaration Form 6059B. The previously developed FTA will be used as the basis for the initial testbed demonstration capability. The FTA hardware will be modified with an electronic digitizing pad and software will be added which will allow the "pen input" of information required to complete the 6059B. The **EFTA** will present the 6059B questions in either Spanish or English. The user will input the information required (printed in block capitals) review and accept the answers and sign the completed form.

This developmental phase will:

- Convert the existing FTA for digitized input,
- develop the handwriting input capability to present and complete the 6059B,
- recall and print the completed 6059B card from the digitized, handwritten input on demand.

Specific deliverables include:

- A proof-of-concept demonstration of the **EFTA**.
- A Final report.

**U. S. CUSTOMS**  
**ENHANCED FORMS TRANSLATOR ASSISTANT PROGRAM**  
**COST PROPOSAL**

**DIRECT COSTS**

LABOR (RATES INCLUDE FRINGE BENEFITS)		RATE	HOURS	COST	
CO-PRINCIPAL INVESTIGATOR	MULLALLY	\$25.64	200	\$5,128.00	
CO-PRINCIPAL INVESTIGATOR	KINCAID	\$38.84	40	\$1,553.60	
GRADUATE STUDENTS		\$5.51	600	\$3,306.00	
TOTAL DIRECT SALARY					\$9,987.60
OTHER DIRECT COSTS					
• MATERIALS & SUPPLIES				\$2,000.00	
• TRAVEL				\$1,520.00	
• EQUIPMENT				\$5,000.00	
TOTAL OTHER DIRECT COSTS					\$8,520.00
TOTAL DIRECT COSTS (LABOR + ODC)					\$18,507.60
INDIRECT COSTS					
• 48% X DIRECT COST LESS EQUIPMENT					\$6,483.65
TOTAL COST					\$24,991.25

**TRAVEL DETAIL**

	COST PER TRIP	TOTAL COST
<u>WASHINGTON, DC</u>		
1 PERSON 2 DAYS 2 TRIPS		
1 ROUNDTRIP AIRFARE @ \$376 (CONTRACT RATE)	\$376.00	
2 DAYS SUBSISTANCE & LODGING X 1 TRAVELER X \$131 PER DAY	\$262.00	
VICINITY MILEAGE ( 40 MILES X 1 TRAVELER X \$0.20 PER MILE )	\$8.00	
	\$646.00	\$1,292.00
<u>LOCAL TRAVEL</u>		
30 ROUNDTRIPS BETWEEN UCF & ORLANDO		
INTERNATIONAL AIRPORT (38 MILES X \$0.20 PER MILE)	\$7.60	\$228.00
TOTAL TRAVEL COST		\$1,520.00

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this white paper.



## **COST PROPOSAL JUSTIFICATION**

**Salaries and Wages:** To achieve the projected development goals of the EFTA project a moderate level of effort will be required. The project will require the expertise of two faculty members, one with project management and system analysis experience and one with human-computer interface and performance measurement experience. The level of effort required to complete the preliminary design analysis, develop software design proficiency and complete the initial Proof-of Concept EFTA will require the commitment of a principal investigator and a co-principal investigator. Additionally, two students will be required. These students will require a 50% level of support during the regular academic year and a 100% level of support during the summer. One Graduate student is needed from the human factors area to assist in the behavioral factors of the EFTA. Two students will be required to provide computer programming support during the initial stages of development. The uniqueness of computer-based speech programming will require a minimum of two programmers to provide the necessary depth and level of effort required. Salary costs are estimated at \$9,987.60.

**Materials and Supplies:** A moderate level of supplies will be required. Consumable supplies used during prototype development will mainly consist of computer supplies, presentation materials and brochures. Reproduction costs are included. Total costs estimated for supplies is \$2,000.00.

**Equipment:** An IBM PC AT or 100% clone will be required as the development platform for the EFTA. The computer previously used in the FTA development will be used as the development platform for the EFTA. Additional hardware and software to support the pen-based input device will be required. Costs for the required equipment and software are estimated at \$5,000.00.

**Travel:** Travel anticipated will include repeat travel expenses incurred in visiting the EFTA prototype test site at the Orlando International Airport. Travel for 2 liaison and demonstration trips for the principal investigator to Washington, DC is included. Total estimated travel costs are \$1,520.



# ATTACHMENT 5

## Final Report



U.S. Customs Service  
Forms Translator Assistant

## Project ACCEPT White Paper

PROOF-OF-CONCEPT  
DEMONSTRATION



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Institute for Simulation and Training  
University of Central Florida  
12424 Research Parkway  
Orlando, Florida 32826

U. S. Customs

Automated Customs Clearing, Examination, and Pre-screening of Travelers

PROJECT ACCEPT  
A  
WHITE PAPER

OVERVIEW

This paper discusses a three phase approach for demonstrating and proving the concept of a paperless pre-screening process for international airline travelers. The research topics presented include the computer presentation, input, transmission and data integration into the U.S. Customs "Master Plan for Air Passenger Processing at U.S. Airports for the 1990's".

Outlined below are the Background, Introduction, Objectives, Technical Approach, and Deliverables for the ACCEPT System research.

BACKGROUND

The Institute for Simulation and Training, University of Central Florida, under contract to the U.S. Customs Service, has developed a computer assisted Forms Translator Assistant (FTA). This Research and Development contract was the result of an unsolicited proposal to the U. S. Customs Service. The unsolicited proposal sought to demonstrate the potential use of the FTA as a means to allow foreign visitors, with low or nonexistent English reading skills, to complete the U.S. Customs declaration forms assisted by a low-cost computer presentation. This project is on time and has met the objectives of the FTA proposal.

Those objectives were to:

- Take advantage of recent advances in computer technology which support computer delivered speech and text;
- Design a functional Forms Translator Assistant in as short a time as possible; and,
- Produce and test this Forms Translator Assistant for proof-of-concept within six months (or sooner) after program start.

The demonstrated success of the Forms Translator Assistant was the first, and most critical, step in the development of an **Automated Customs Clearing, Examination, and Pre-screening of Travelers (ACCEPT)** system. Without this feasibility demonstration, the decision to proceed with the development of a automated, computer-based system to pre-



screen air travelers could not logically proceed to the next developmental step, a prototype testbed.

## INTRODUCTION

This White Paper outlines a research and development project to determine the system requirements and develop a prototype testbed for a paperless U. S. Customs Declaration procedure. The basis of this White Paper is an ordered "Systems Approach" to analyze, design, develop, and evaluate the **ACCEPT** system.

In the analysis and development of the FTA, it became apparent that the development of an automated capability to complete the Customs declaration forms could be achieved if a number of critical issues could be resolved. These critical issues are:

- Can the instructions for completing the Customs declaration forms be presented to the user in both text and speech in a selected foreign language via a low-cost, computer based system?
- Can the user complete the Customs declaration forms using a system which will accept hand written information?
- Can the system receive, store, and reproduce the signature of the user with a high degree of accuracy so that it can be introduced as evidence in a court of law if required?
- Can the system provide a means of printing a completed Customs form on demand at any time?
- Can the system provide a portable electronic means to store a personal copy of the data which will accompany the passenger while in route?
- Can the system interface with other sources such as the Advanced Passenger Information System (APIS) and from airline ticketing systems?
- Can the system transmit the data collected in a timely fashion to the U.S. Customs Service Data Center in a format compatible with the Interagency Border Inspection System (IBIS) and the APIS.
- Can the system be made fully compatible with the existing computer based systems within the Air Passenger Processing Master Plan for the 1990's.

If the critical issues listed above can be addressed in a systematic research and development program then the goal of 100% automated pre-screening can be achieved by the U.S. Customs Service. We propose to develop a prototype testbed to demonstrate that those critical issues listed above can be achieved.

The availability and cooperation of the Greater Orlando Aviation Authority has been sought and gained on a previously proposed project to research the FTA prototype development under a Florida High Technology and Industry Council grant and under the U.S. Customs FTA contract.

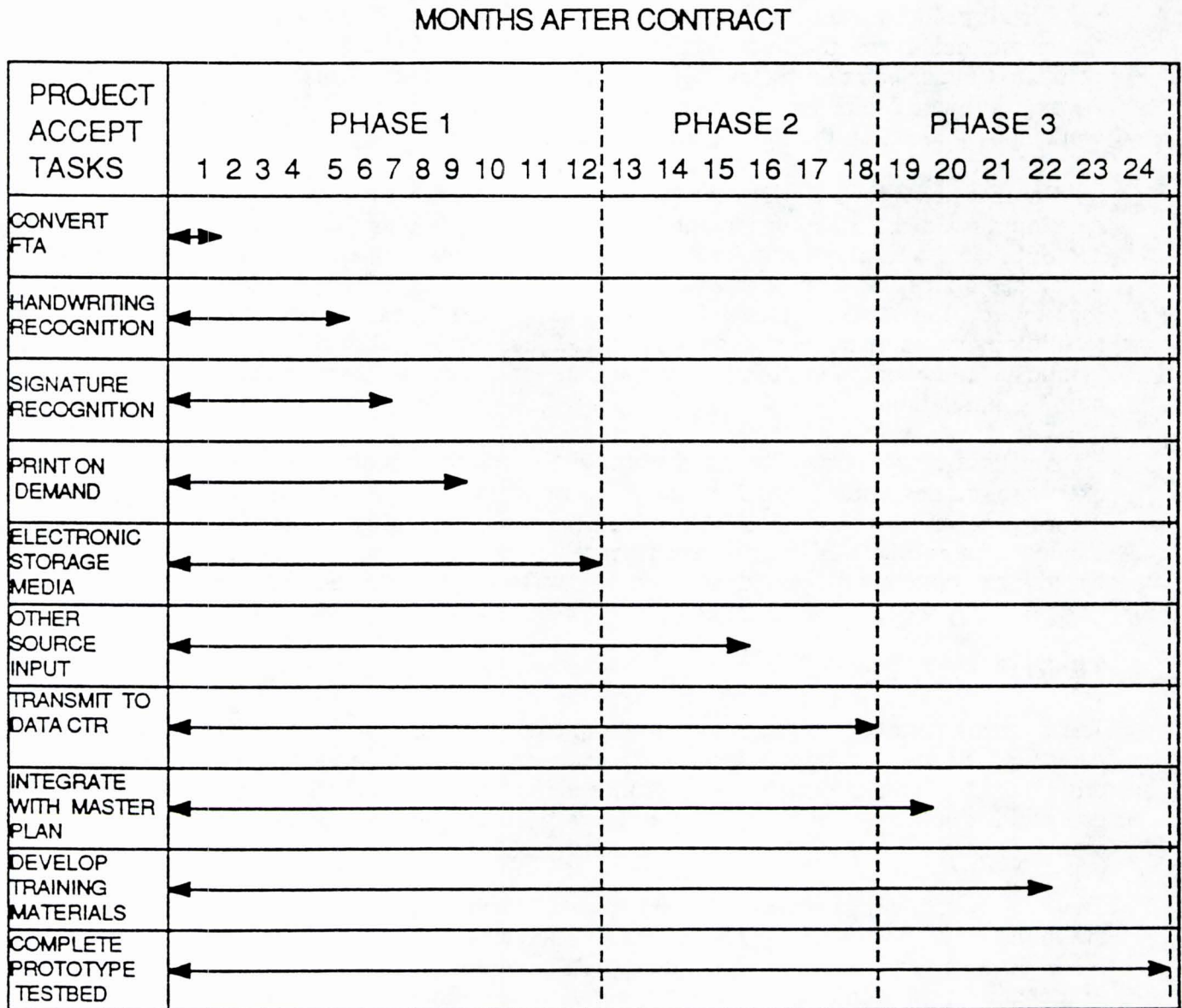
## OBJECTIVES

The objectives of this project are to:

- Take advantage of recent advances in computer technology which support computer delivered speech and text, and pen-point or pen-input systems;
- Analyze the requirements to develop a functional **ACCEPT** Prototype Testbed; and,
- Design a functional **ACCEPT** Prototype Testbed;
- Develop a prototype **ACCEPT** Testbed;
- Evaluate the developed **ACCEPT** Prototype Testbed;

- Develop Functional Specifications for the **ACCEPT** System; and,
- Maintain and demonstrate the **ACCEPT** Prototype System Testbed.

This project is highly feasible because it builds on the existing programs currently under development at IST. Figure 1 is a timeline for the **ACCEPT** System Prototype Testbed Development Program.



*Figure 1. ACCEPT System Prototype Testbed Development Program*

This developmental project will capitalize on the success of several ongoing R&D projects at IST. These projects include technology developed and funded by the Department of Defense



(DoD) and the Florida High Technology and Industry Council. Related current and planned R&D projects include:

- **Computer based language instruction.** In cooperation with a large commercial textbook company, IST is currently developing elementary English as a Second Language (ESOL) projects using related low-cost presentation technology.
- **Distributed Interactive Simulation Standards.** The project will draw on the expertise of the personnel currently involved in developing Distributed Interactive Simulation (DIS) Standards under contract to the Defense Advanced Research Projects (DARPA) and the U. S. Army, Project Manager, Training Devices (PM TRADE). IST has held a series of five workshops to develop the international standards for DIS.
- **Prototype Testbed Development.** The project will benefit from the experience of developing and maintaining the Intelligent Simulated Forces (ISF) Prototype Testbed for PM TRADE. IST occupies a unique research position in that it maintains two DARPA funded and developed M1 Tank simulators. The University of Central Florida, IST, was selected as the location of these simulators to provide the greatest possible exposure of this emerging technology to industry and academia. IST has published widely and hosted a variety of symposia and workshops to further the state-of-the-art in distributed, interactive, real-time training simulation.
- **Artificial Intelligence based Database Search Protocols.** IST has gained considerable expertise in developing DoD Lessons Learned systems. These systems are designed to provide the users of large distributed databases the capability to screen and review previous incidents for similarities and to learn from that previous experience. Artificial Intelligence (AI) based protocols have been developed to assist the user in detailed data searches and in designing key words for new inputs.

## TECHNICAL APPROACH

The Systems Approach will be used in the phased development of the ACCEPT System. The ACCEPT System Prototype Testbed Development Program outlined above identifies several critical issues which must be successfully demonstrated for the total System to meet design goals. Phases have been established to allow critical design review and create system decision points. The critical issues have been listed as tasks in the Statement of Work section.

The FTA system will function as the initial component of the ACCEPT testbed. This will allow the initial FTA kiosk design to be used as a platform to mount a digitizing tablet directly below the FTA keypad and screen. This design will allow the user to view their digitizer pen input as it appears on the computer screen for correctness. Once the user is satisfied that the block capital pen input shown on the screen is correct, they will tap the entry block on the digitizing pad. This will input the answer and automatically convert it to printed screen text which will appear in the appropriate space on the 6059B. The user will sequentially answer the questions found in the prototype 6059B developed for the FTA project. After all 14 questions on the the FTA Prototype 6059 are filled in, the user will be instructed to review the input for accuracy one final time, and then sign the completed form.



If any question is left unanswered the user will be re-prompted to complete that question. The user will be told that they must fill in the 6059B completely to be admitted into the U.S. Failure to fill in all of the questions prior to signing the form will call up a screen and voice message with instructions to seek further assistance from the ACCEPT System or from available airline or Customs personnel. If the user fails to fill in the form completely they will be told to expect to be delayed upon arrival in the U.S. by Customs Officers while they complete the 6059B form.

System development phases are:

- Phase 1, the proof-of concept **input** phase, the completed 6059B form will be printed and an electronic data base will be created on the FTA host computer.
- Phase 2, the proof-of-concept **transmission** phase, an electronic transmission will be produced tied into a network, or transferred into a portable individual transmission means (Memory Card or Magnetic Boarding Card) or batch transmission (Floppy disk) means.
- Phase 3, the proof-of-concept **integration** phase, the ACCEPT system prototype testbed will be evaluated to determine if the system can automate the transmission of required data needed to create a paperless pre-screening system.

## **DELIVERABLES**

### **Phase 1. Develop and demonstrate a handwriting input device for the proof-of concept demonstration testbed for the ACCEPT System.**

Phase 1 will be completed within a 12 month period. The goal of phase 1 is to analyze, design, and develop a capability which will allow the handwritten input of information to complete the Customs Declaration Form 6059B. The previously developed FTA will be used as the basis for the initial testbed demonstration capability. The FTA hardware will be modified with an electronic digitizing pad and software will be added which will allow the "pen input" of information required to complete the 6059B. The FTA will present the 6059B questions in both Spanish or English. The user will input the information required (printed in block capitals) review and accept the answers and sign the completed form.

This phase will:

- Convert the existing FTA for digitized input,
- develop the handwriting input capability to present and complete the 6059B,
- develop the capability to capture the x, y, and time constants of the user's signature,
- recall and print the completed 6059B card from the digitized, handwritten input on demand.

Specific deliverables include:

- A proof-of-concept input demonstration of the modified FTA.
- A Phase 1 report.

### **Phase 2. Develop and demonstrate a capability to store, transmit, and accept input from other sources for the proof-of concept demonstration testbed for the ACCEPT System.**

Phase 2 will be completed within a 6 month period. The goal of phase 2 is to analyze, design, and develop a capability which will allow for the input, storage, and transmission of electronic data to and from the ACCEPT System. The input developed in phase 1 will be analyzed to design and develop the capability to capture, store, and transmit the completed 6059B data

recorded by individual or flight, and provide for an automated input to the Interagency Board Inspection System (IBIS) .

This phase will:

- investigate the means to transmit individual user data (memory card, magnetic stripe boarding pass, etc.),
- investigate the capability to batch transmit (by airline flight) the completed 6059B declaration forms (floppy disk, modem, etc.)
- design and develop the interface protocols to interact with U.S. Customs Service, Newington Data Center.

Specific deliverables include:

- A proof-of-concept demonstration of the transmission of the completed 6059B data.
- A Phase 2 report.

### **Phase 3. Evaluate and refine the ACCEPT system proof-of concept demonstration testbed for integration into the Master Plan for the 1990's.**

Phase 3 will be completed within a 6 month period. The goal of phase 3 is to analyze, design and develop the capability of the ACCEPT system to be fully integrated within the automated systems of the IBIS and the "TEC II" system. It is anticipated that the success of Phase 1 and 2 will lead to the adoption of the ACCEPT system as the principle automated input device for international airline passenger pre-screening.

This phase will be used to :

- Integrate the ACCEPT system with the Advanced Passenger Information System (APIS), IBIS and the U.S. Customs "Master Plan for Air Passenger Processing at U.S. Airports for the 1990's" ,
- complete ACCEPT System proof-of-concept system specifications,
- design and maintain a testbed for the future development of advanced passenger screening systems.

Specific deliverables include:

- A proof-of-concept demonstration of the integration of the ACCEPT System.
- A Phase 3 report.

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